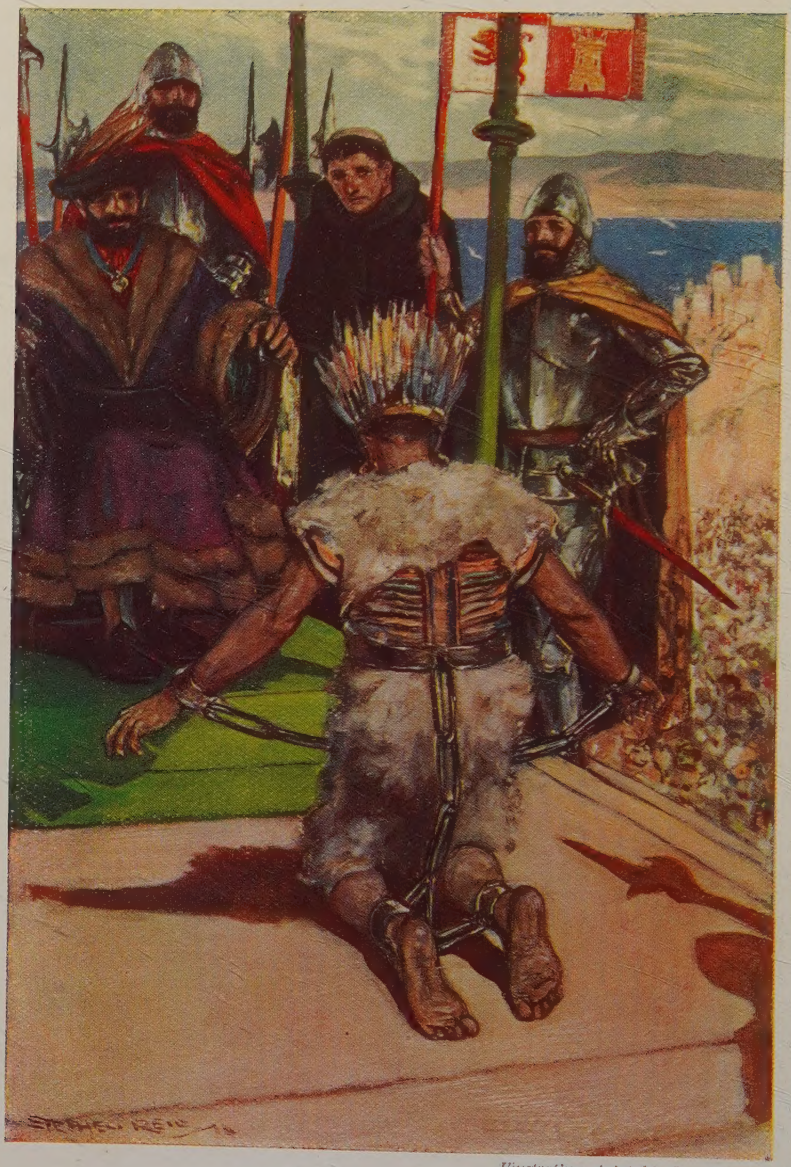
The Young Folk's Book of Discovery

HAROLD ANDERSEN LIBRARY
Wisconsin State University
WHITEWATER

A GIFT FROM

Mr. and Mrs. Connor T. Hansen

THE YOUNG FOLK'S BOOK OF DISCOVERY



Illustrations printed in Great Britain

MONTEZUMA BEFORE CORTES

Stephen Reid

[*See p.* 99]

Fr.

THE YOUNG FOLK'S BOOK OF DISCOVERY

BY

T. C. BRIDGES

AUTHOR OF

"MARTIN CRUSOE", "THE SKY RIDERS", ETC.

WITH ILLUSTRATIONS IN COLOR
AND BLACK AND WHITE

G
175
B7
1925

BOSTON
LITTLE, BROWN, AND COMPANY
1925

232456

Copyright, 1924, 1925,
By Little, Brown, and Company.

All rights reserved

Printed in the United States of America

CONTENTS

CHAPTER		PAGE
I.	The Beginning of Exploration	1
II.	The Wander Thirst	9
III.	The Northmen	19
IV.	Marco Polo	26
V.	Feeling for the East	32
VI.	A Born Adventurer	39
VII.	Early Voyages of Columbus	48
VIII.	Later Voyages of Columbus	58
IX.	The Discovery of the Pacific	66
X.	The English take a Hand	74
XI.	Cortes in Mexico	82
XII.	Pizarro in Peru	88
XIII.	Frobisher and Sir Humphrey Gilbert	95
XIV.	Northward Ho!	102
XV.	The Arctic Seas	109
XVI.	Hawkins and Drake	117
XVII.	Sir Walter Raleigh	127
XVIII.	The Romance of Pocahontas	134
XIX.	Trading with the East	141
XX.	Early African Exploration	149
XXI.	Rounding Cape Horn	157
XXII.	Russian Exploration	166
XXIII.	The Buccaneers	172

CHAPTER		PAGE
XXIV.	Voyages in the Pacific	179
XXV.	The South Sea Islands	190
XXVI.	The Tragic End of Captain Cook	197
XXVII.	The Elusive Northwest Passage	205
XXVIII.	Captain John Franklin	214
XXIX.	Adventures in Africa	222
XXX.	David Livingstone	230
XXXI.	Seeking the North Pole	236
XXXII.	Peary reaches the Pole	242
XXXIII.	The Antarctic	247
XXXIV.	Shackleton and Scott	252
XXXV.	Triumph and Tragedy	258

ILLUSTRATIONS

	PAGE
Montezuma before Cortes	*Frontispiece*
Athenian Trireme	4
An Athenian Trireme (Reconstruction)	4
The World as known to Herodotus	6
Arab Dhow	11
Phœnicians trading with Ancient Britons	14
Mohammed preaching to Pilgrims at Mecca	15
Chinese Junk	17
Erik the Red sets sail for Greenland	22
The Hereford Map, 1280	27
Marco Polo lands at the City of Ormuz	30
An Astrolabe	49
The Ships of Columbus	52
Columbus at the Court of Spain	54
The Death of Columbus	55
Landing of Columbus	62
The Departure of John and Sebastian Cabot from Bristol	70
"John Cabot encountered enormous icebergs"	71
An Old Map of the New World showing the supposed Passage into the Indian Seas	75
Carrack about the time of Cabot	78
The Spaniards entering Tlascala	86
The Retreat of Cortes	87

PAGE

Death of the Inca 94
The March of Alvarado 95
Ship about the Period of Frobisher 96
Eskimo Village at Prince Albert Sound 102
The Northwest Passage 103
" Icebergs surrounded the ships " 106
Sledging over the Arctic Prairie in Summer 107
Hudson was seized and bound 110
An Early Map of the New World (1540) 118
" Hawkins landed with well-armed followers " 118
Queen Elizabeth visits the " Golden Hind " at Deptford 119
The " Golden Hind " in the Moluccas 124
The Boyhood of Raleigh 134
Raleigh joins Humphrey Gilbert on his First Voyage 135
Jenkinson claims the Sultan's Hospitality 142
" The Dutch saw a giant standing on a cliff " 158
Men and Women Natives of Siberia 159
Maori, with Feather Cloak and Greenstone Club 163
A Native of British New Guinea 164
A Native of Dutch New Guinea 164
Buccaneers attacking a Spanish Ship 174
A Tale of the Pacific 175
West Australian Native 176
A Polynesian Native in Ceremonial Costume 185
Captain Cook presents the Natives with some Sheep and Goats 190
Stone Statues at Easter Island 198
The Death of Captain Cook 199
The First Ptarmigan 214
Three-roomed Eskimo Dwelling, Coronation Gulf 215
Eskimo Man and Woman 219

PAGE

Nansen on the Bridge of his Ship 230
Over Sea ice with a Dog team 231
Livingstone at the Victoria Falls 232
African Warrior in War-paint 233
Admiral Peary on his Ship 250
Peary plants his Flag on the North Pole 251
The "Nimrod" under Sail and Steam forcing her Way through the Pack ice 258
Captain Scott writing up his Journal 259
"Captain Oates never came back" 262

Beyond the East the sunrise, beyond the West the sea,
And East and West the wander-thirst that will not let me be; . . .
And there's no end of voyaging when once the voice is heard,
For the river calls and the road calls, and oh, the call of a bird!

GERALD GOULD

THE YOUNG FOLK'S BOOK OF DISCOVERY

CHAPTER I

THE BEGINNING OF EXPLORATION

Myth and Mystery—First Land, then Water—Trade aids Geography—Gold from Ophir.

ONE of the greatest griefs of the modern writer about geography is that the Phœnicians have left no written records of their voyages. The Phœnicians were the greatest colonizing nation of early times, and the only one that dared venture out into the open seas.

You and I can hardly imagine with what terror the people of the old days looked upon the sea. In order to get any understanding of their feelings about the sea you must remember that they had no maps or charts, no compasses, only the most primitive means of finding their way when out of sight of land. Bear in mind that their ships could only sail before a wind, and that their usual means of progress was by rowing.

Now rowing is all very well in smooth water, but in a really rough sea you cannot use oars, and in such a case those ancient ships simply drove before the wind like so many haystacks. There were no lighthouses, there was no means of knowing where treacherous reefs or rocks lay below the surface, and once away from home waters the bold navigator took his life in his hands.

Add to all this that every one firmly believed in terrible sea monsters that swallowed ships, in evil spirits of all kinds that haunted the unknown coasts, and that on most

of the distant shores lived extremely savage peoples whose first thought when they saw a ship was to kill every one on board and plunder the vessel.

Under these circumstances it is really amazing to find that, fully three thousand years ago, the Phœnicians were not only sailing all up and down the Mediterranean, but had also reached the Black Sea and had thoroughly explored the Red Sea. At some very early time they were trading with India, and, as we know, they acted as pilots to King Solomon's ships in their three-year voyages to Tarshish.

They did more. Recent discoveries prove that Rhodesia, that great new colony which extends both north and south of the vast Zambezi River in Africa, is full of remains of a forgotten civilization. There is Zimbabwe in Mashonaland, with its tremendous walls no less than sixteen feet thick, its great towers, fortresses, and slave pits, its strange remains of smelting furnaces.

There is also another less well-known but even more wonderful ruined city in Northern Rhodesia. These and other remains show traces of the Phœnician religion, and it seems that this extraordinary race was actually colonizing in South Africa at least a thousand years before the birth of Christ.

If only we had a written history of those marvelous voyages we should be able to read true stories which would be more wonderful than Sir Henry Rider Haggard's "King Solomon's Mines" or other efforts of modern imagination.

The few facts that we have concerning the Phœnicians prove that they were indeed most wonderful sailors. We know that they founded colonies in Asia Minor about 1200 B.C., that they were colonizing in Spain a century later, and that they founded Carthage, afterward Rome's most power-

ful rival, in the ninth century before Christ. During the seventh century certain Phœnicians actually sailed right round Africa, starting in at the Red Sea and coming back by the Pillars of Hercules that is to say, by Gibraltar.

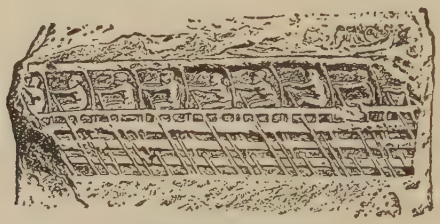
Again, we can be fairly certain that the Phœnicians visited Cornwall, where they traded for tin, although credit for the actual discovery of Britain is usually given to Himilco, the Carthaginian.

The strange thing about the Phœnicians is that their own original country was but a very small one, a mere strip of land some two hundred and twenty-five miles long and only about twelve in width. But perhaps the smallness of the country was the reason why her people were driven to take to the sea.

Tyre, the capital, must have been an amazing city, a great hive of trade, and of course the greatest center of ship-building on earth. Writing of Tyre, the prophet Ezekiel says, "Tyre was a merchant of the people for many isles." He tells us that her shipboards were made of fir trees of Senir, her masts of cedars from Lebanon, her oars of the oaks of Bashan, and the benches of her galleys of ivory brought out of the Isles of Chittim. I fancy, however, that this description applies to her ships of state, for I feel sure there was not much ivory about her tough, weather-beaten merchant ships.

Mother Tyre went down in the sixth century B.C., but her great colonies continued to flourish, and from one of these, Gades (the modern Cadiz), the explorer Hanno made his celebrated voyage down the west coast of Africa. It is said that he started with a fleet of sixty galleys, each driven by fifty oars. He went as far south as the Bight of Benin, and founded six colonies. He appears to have been the first European to meet the great African gorilla, the appearance of which terrified his men.

When he arrived home again he inscribed a brief account of this voyage on a tablet, which he placed in the temple of Moloch. There still remains a Greek translation of this tablet, which is known as "the Periplus of Hanno." The exact date of this voyage is not known, but it was somewhere between 570 and 470 B.C.



ATHENIAN TRIREME
From a bas-relief on the Acropolis at Athens

With regard to the ships in which these wonderful Phœnicians made their surprising voyages we really know next to nothing, but we believe that they were triremes—that is, vessels with three banks of oars and square sails which were hoisted only when the wind was favorable.

AN ATHENIAN TRIREME (Reconstruction)

Aristotle tells us that the Carthaginians were the first to increase the size of their galleys from three to four banks of oars.

As the Phœnician sea power died down that of the Egyptians and the Greeks increased. The Egyptians were the first people to build really big ships. One de-

scribed by Calixenus of Alexandria was actually four hundred and twenty feet in length, and is said to have required four thousand rowers. But I think we must take this description with a grain of salt, for although the Egyptian kings were rich enough to build anything they pleased, yet such a ship worked by oars would have been hopelessly clumsy.

The vessels in which these early folk made their big voyages were mostly quite small. Indeed, as we shall see, almost all the great explorers from those very early days right up to the present century used very small craft. The seaworthiness of a ship has little to do with her size, and plenty of craft of ten tons and under have successfully crossed the North Atlantic. I may mention that there is no heavier test than that for any kind of vessel.

The trade of the Phœnicians brought them often into Greek ports, and it seems likely that the Greeks learned their navigation from the Phœnicians. Not that there was any love lost between them. We know from the greatest of Greek poets, Homer, that the people of Tyre and Sidon were cruel and greedy, dealers in slaves, and enemies of all other nations. In one place Homer writes of them as "doing all manner of iniquity to men."

In Homer's time the Greeks regarded the ocean as a gigantic river which visited every portion of the earth and completely surrounded the land. The Greeks, however, took to the sea like ducks to water, and first the Corinthians and later the Athenians built stout ships, in which they traveled long distances. The pity is that we know so little about those early explorers, but this we do know, that it was a Greek named Pytheas who was the first on record to leave the comparative safety of the land-locked Mediterranean for a voyage of discovery into the ice-clad regions of the Arctic.

Pytheas sailed north until he came to Thule, which may have been the Shetlands, or more probably Iceland. At any rate, he got inside the Arctic Circle, for the sun refused to set, a matter which caused him great uneasiness. The farther he went the odder he found things, for now the sun, which at first never set, would not rise.

At long last he came to a great dark wall rising straight up out of the sea, while at the same time something seized

THE WORLD AS KNOWN TO HERODOTUS

his ship and held it so that he could no longer move forward. The winds could no longer move it, and even his anchor when thrown over refused to sink. In other words, he was frozen up.

So Pytheas came to the conclusion that this was no place for any sun-loving Greek, and turning tail cleared out as quickly as possible, and reached home safely with his tales of marvel. You can imagine how eagerly these were

listened to in the wine shops of Athens, and how the ancients wagged their beards and whispered one to another what a wonderful imagination Pytheas had.

From Homer we learn that the Greeks of his time were pretty well acquainted with the geography of the Eastern Mediterranean from the Black Sea as far as Sicily. Some probably went as far as Spain, but as travelers they were not the equal of the Phœnicians.

As time passed the Greeks became the leaders in learning, and so long ago as the sixth century B.C. we find Thales actually teaching that the earth was a sphere.

Then came Herodotus, who may truly be called the father of geography as he was also the father of history. Born about 485 B.C., we know that he visited every part of Greece, most of the Ægean Islands, as well as Macedonia and Thrace. He traveled into Asia Minor and into Egypt, and visited Tyre and even Babylon.

Not only did he travel, but he wrote about his travels. If he had lived to-day he would have been correspondent for some great newspaper, for he had the happy knack of noting just what would interest people, and was able to put it down in an interesting manner.

More than two thousand three hundred years have passed since the days of Herodotus, yet we still read his works with delight, and although our fathers were rather apt to jeer at his stories modern research has proved that a great many of them which at one time were supposed to be mere myth and legend are perfectly true. It is rather nice to know that even in his own day people thought a lot of Herodotus, and that he was invited to read his books first at the Olympic Games and then before the Senate at Athens.

Just think of the sensation if Scott or Shackleton or Peary had been asked to read the account of their travels

before the House of Lords or the American Senate! The Senate was so pleased that they voted Herodotus the sum of ten talents, a very comfortable fortune in those days. Nowadays an explorer has to trust to making a bit of money out of his books and cinema rights, and is lucky if he keeps out of the workhouse in his old age.

The work of Herodotus was really wonderful. He was, for instance, the first of the Greeks to know anything of the great river Danube or of the Scythian people, who lived beyond the Caspian Sea. He declares that they were by no means barbarous, but an "upright and civilized nation."

He knew the size of the Caspian and that it was separated from all other seas. He even knew something of India, speaks of the immense numbers of the people, how they abstained from animal food and wore cotton clothes.

In Egypt he traveled as far south as the Cataracts of the Nile, and he tells us an immense deal about the country. He also knew the African coast as far west as Tripoli. He even knew of the river Niger, though he got it sadly mixed up with the Nile, and he writes of the Central African forests and swamps and of the Pygmies.

Yet curiously enough he knew next to nothing of Italy, and nothing at all of Western Europe. All the same, Herodotus was a great man, and I recommend his works very strongly to all of you.

CHAPTER II

THE WANDER THIRST

Roman Geography—Longitude and Latitude—Ptolemy—The Mystery of the North—The Arabian Explorers—The Amazing Journey of Ibn Batuta.

SEEING that the Roman Empire was the greatest that ever existed before the British, it is rather curious to find that the Romans were such bad geographers. They conquered Spain, yet never knew its shape; Pompey led Roman legions to the Caspian and into the Caucasus, yet brought back no accurate map.

Four hundred years after Herodotus Strabo believed that the Pyrenees ran north and south; he charted Britain as a triangle of which one part approached France and another Spain, and he put Ireland right up north of Britain. He also wrote that Ireland was wrapped in everlasting snow and that its people were cannibals. He even solemnly discussed the problem as to whether Italy itself, in which he lived, was in shape a square or a triangle.

When you consider that Rome in Strabo's days was an enormous city, with a wonderful water supply, almost modern drainage, six-story houses, and full of brilliant artists, writers, sculptors, painters, it really does amaze one to find how absurdly little even its cleverest people knew about the earth on which they lived.

The way in which the Romans regarded Britain was most extraordinary. To them it was more remote than New Guinea is to us to-day. Even after Julius Cæsar had conquered the South of England little was known of the rest of the country. It was not even certain that it was an island. But I will not talk too much about the Roman conquest of Britain, for, after all, that was an adventure rather than a discovery.

A little before the days of Cæsar lived Claudius Ptolemæus, commonly known as Ptolemy. He was a native of Egypt, and by all odds the greatest geographer since the days of Herodotus. He lived at Alexandria, then almost the biggest port on the Mediterranean and thronged by sailors and adventurers from every part of the known world.

Herodotus, as we have seen, did his own exploring. Ptolemy stayed mostly at home, and got information from his visitors. But even if he was something of what Sir Walter Scott calls a "carpet knight", he yet did so much for the sciences of geography and astronomy that we must give him a little space.

Now if you will just open your atlas and look at any map, you will see that it is divided by lines drawn from side to side and top to bottom. These lines, I need not remind you are those of latitude and longitude, and their great value is to enable you to tell exactly the position of any particular place or to measure its distance from any other place.

Although this system had been known in a rough form before the days of Ptolemy, yet Ptolemy was the first to adapt it and settle it. In other words, he was the first man to fix geography on the basis of mathematics. He drew up twenty-six maps, showing as far as he could the position of various places, and although these maps

are full of blunders yet they were a very big advance on any that had been previously made.

He knew of Denmark and Sweden and of the Azores Islands. He even mapped the course of the great Russian river Volga. But the most amazing part of Ptolemy's

ARAB DHOW

geography is that which treats of India and of the Asiatic countries beyond the Ganges. It seems fairly clear that he actually knew of the great island of Sumatra. At any rate, he mentions the Malays. He speaks of "Jadadiva", which almost certainly was Java. The "Seres" from whom he says that silk was obtained were of course the Chinese.

And here I would like to say that in those days China was a very great Power. We have historical record that

in the year 130 B.C. the city of Khotan in Little Bokhara paid tribute to China, and a little later the Chinese armies were conquering the country almost as far west as Persia.

In A.D. 94 a Chinese military officer with an army reached the eastern shore of the Caspian Sea. He had been ordered to get into communication with Ta-Thsin, or the Great Empire, the name by which the Chinese called the Roman Empire.

Somewhere about seventy years later Aurelius sent ambassadors to China. We do not know how they got there, but it was probably by sea. What a wonderful story they must have brought back of their adventures, and what a thousand pities it has not been preserved!

In those days the trade with the East was largely in the hands of the Arabians. Seeing what the Arabs are to-day, mostly desert dwellers and wandering from one oasis to another, this may sound curious. But you must remember that even to-day the coast Arabs have their dhows, which are by no means bad sailing craft, and also that in those earlier times the Arabs were distinctly more civilized than at a later date. Arabian merchants in the second and third century after Christ had a monopoly of the Indian trade and became enormously wealthy.

So complete was this monopoly that the Romans actually thought that cinnamon, cassia, and myrrh were produced in Arabia. The Arabs had vessels of very considerable size, and they understood about the monsoons—that is to say, winds which blow across the Indian Ocean in different directions at different times of the year. They got not only spices, but also tin, cotton cloth, and many other commodities from India.

For many centuries the Arabs continued their commerce with the East, and long after the break-up of the Roman Empire and the beginning of the Dark Ages they still

carried on almost all the trade that existed between Europe and Asia.

And now I am going to make a great jump, carry you right on to the year A.D. 1324, and tell you a little about the greatest of all Arab explorers.

This was the Sheik Abu Abd Mohammed Ibn Abd Allah El Laivati. Luckily his friends did not have to remember all this string of names, for he was usually known as Ibn Batuta.

Born in Tangiers, he lived there until manhood. He was a good Mohammedan, and when he grew up made up his mind to go on pilgrimage to Mecca, a journey which is still the object of all devout Mohammedans. He went by Alexandria, and when he got there he met a priest, or Imam, of his own religion named El Aaraj, who was a very pious man and of great learning.

El Aaraj told him that he perceived that he was fond of travel, and said, "You must visit my brother Farid Oddin in India, my brother Rokn Oddin in Scindia, and also my brother Borhan Oddin in China."

Ibn seems to have considered that this was a pretty large order, yet he made up his mind to do it, but first he took a trip up the Nile. He went as far as Nubia, and there found a war on, so returning he took his way into Palestine, where he visited the graves of Abraham, Isaac, and Jacob. He then went to Tyre and on to Mount Lebanon, which he found full of the cells of hermits. After that he traveled to Damascus and then to Medina.

Basra in Persia, of which we heard so much during the Great War, was his next objective, and from Persia he traveled straight back to Bagdad and thence to Mecca, where he seems to have stayed for three years. From Mecca he went all down through the Arabian desert to Yemen, and crossed the Red Sea to Abyssinia, which king-

MOHAMMED PREACHING TO PILGRIMS AT MECCA
Morris Meredith Williams

years old, but Ibn Batuta declares that he did not look more than fifty.

Cabul he found to be inhabited by Afghans, as it is now, but it was in a very ruinous state. A violent and powerful people, and great robbers, he writes of them. One thing he says about the Afghans is interesting. He declares that they came from Persia; the Afghans' own story is that they are descended from the Jews.

From Afghanistan Ibn Batuta traveled southward through the stony passes of the mighty Himalaya Mountains into India. He visited Delhi, an enormous city, yet, as he says, a desert, because all the people had run away, owing to the cruelty of the Emperor.

The Emperor, who was a Turk, was, however, kind enough to Ibn. He made him a judge in Delhi at a salary of twelve thousand dinars, and gave him besides a house and a large amount of money in cash. Ibn took on the job, only to find that living at Court was so expensive that he soon spent all his money and got heavily into debt. In order to get straight again, our ingenious traveler composed a wonderful poem praising the Emperor, and read it to him. Whereupon the Emperor paid his debts, and for a time all went well.

But fresh trouble was brewing. A visiting prince fell out with the Emperor, and it was found that he and Ibn had been together a good deal. Ibn was denounced, and a great trial began. Poor Ibn fasted and prayed, and on the fourth day was released. But others who had also been cast into prison were sentenced to be trodden to death by elephants whose feet were cased with metal. This scared Ibn so thoroughly that he resigned his judgeship, gave away all he possessed, and became a *fakir,* or beggar.

The Emperor again sent for him, and Ibn came, shaking in his sandals. But the Emperor was all honey once

more, and said, "I know that you love traveling. I will therefore send you as my ambassador to China."

Ibn started off with a fine retinue of cavalry, but fell into fresh trouble. Hindus were attacking Mohammedans; Ibn went to the rescue, was cut off from his men and taken prisoner. He got away and hid in a horrible forest, where he was forced to live on berries and leaves. At last one day he met a black man who called himself by a name meaning "the wounded heart", and who gave him food and brought him back to Delhi. The Emperor, still kind, gave Ibn a fresh escort, and off he went again, and safely reached Calicut—that is, Calcutta.

And here we get the first recorded description of a Chinese junk, with its great sails made of reeds woven into a mat. There were thirteen of these junks in the port, and he embarked in the largest.

That night came an awful storm, and all the ships except Ibn's own were dashed ashore and wrecked. Worst of all, the ship containing the rich presents for the Emperor of China was sunk.

Ibn was left destitute, and being afraid to go back to Delhi sailed for the Maldive Islands, which he says number two thousand and form one of the wonders of the world. He adds that the principal island was governed by a woman.

Here our Arab traveler fell upon his feet, for he was made a judge and married three wives. He also was allowed to ride on horseback, an honor which before had been permitted only to the Vizier, or Prime Minister.

The Vizier grew jealous, and made things so unpleasant for Ibn that he thought it best to make himself scarce. So he took ship, and caught in a storm was driven to Ceylon, where he told the King that he had come to visit the footstep of our forefather Adam. Now Adam's foot-

step is still to be seen on Adam's Peak. It is a mark in the solid rock resembling the imprint of a giant's foot. The Buddhists call it Buddha's foot, and it has long been a place of pilgrimage.

Ibn found climbing the mountain no joke at all. It was so steep that he had to pull himself up by iron chains let into the rock. He remarks on the great number of monkeys, and was told they had a king who wore on his

CHINESE JUNK

head a turban made of leaves of trees and was waited on by four serving monkeys.

From Ceylon Ibn went to Bengal, and from there set sail for Sumatra. He does not say much about Sumatra, except that the King was very kind to him. Ibn seems to have had a way with kings.

This royal personage at any rate fitted him out for a fresh voyage, and at long last Ibn started for China. Ibn was very pleased with China. The people he thought industrious, wealthy, and well governed. He gives us some really interesting details about China. For instance,

that the people used paper money. These were real bank-notes; when worn or dirty they could be exchanged for new ones at the mints. He met many Mohammedans there, and also some Christians. He traveled a great deal in China, until at last civil war broke out; leaving the country he came westward again by India, Persia, and Syria.

You might imagine he was tired of wandering, but not a bit of it, for after another pilgrimage to Mecca off he went into Africa, where he traveled up the Niger and saw many river-horses (hippopotami). He ran into cannibals, who told him that the flesh of white men was not wholesome. At any rate, he came safe out of their hands, and at last, after twenty-eight years of wandering, returned to Fez, in Morocco, where he made his home.

In all the records of early travel there is none to match the amazing wandering of this extraordinary man.

CHAPTER III

THE NORTHMEN

The Discoveries of the Northmen—How they traveled to the West—Their Discovery of Iceland and Greenland—Norse Relics in the United States.

I HAVE spoken of Pytheas, the Greek who was the first of his race to find his way beyond the Arctic Circle. That was in the fourth century B.C. So far as we know, he was the first dweller in Mediterranean countries to attempt such an adventure, and many centuries passed before he had a follower.

Yet we are aware from many passages in Roman literature that the Romans more than suspected the existence of another continent beyond the huge and terrifying rollers of the Atlantic. After the fall of Rome the Roman towns, the only seats of knowledge, were destroyed, and people came back to the belief that the earth was a flat surface surrounded by a boundless ocean. The whole civilization of Southern Europe fell to pieces, and all was fighting, famine, and confusion.

In Northern Europe the case was different. In Scandinavia, the great peninsula which we know as Norway and Sweden, a different and more simple civilization was slowly coming into being.

The Greeks and Romans possessed fertile lands and warm climates, but the Scandinavians, whose lands were

largely sterile mountains and whose climate was too severe for growing anything beyond a little wheat, were driven to the sea to make a living.

They became skilful fishermen, and as their fishing boats grew to ships they also became skilful pirates. Being forced from the beginning to cope with the great surges of the North Sea and of the Atlantic, they built far better and more seaworthy ships than any of the Mediterranean natives, and they sailed to all parts of the coasts of Great Britain and down to France, raiding in every direction.

In the year 872 of our era Harald Haarfagr (the Fair-haired) became King of all Norway, and the very first thing he did after being crowned was to pass a law saying that no one could hold property freehold, but must lease it from the Crown.

You can hardly imagine the trouble that ensued. But Harald stuck to his guns, and the result was that many of his proud freemen took to their ships and cleared out. Some went to the Hebrides, some to the Orkneys, or to the Faroe Islands. Others sailed south and seized land in England and France, but others resolved to go straight to Iceland.

Iceland had been first discovered twelve years earlier by the Viking or Sea Chief Naddod, and visited by several other Norsemen in the interval.

It was in the year 874 that the great emigration began, and though you may find it difficult to believe, it is a fact that before long Iceland had a population of fifty thousand. You must remember that Iceland lies so far to the north that no trees grow there except tiny willows, that grain will not ripen, and that snow may fall in any summer month. The people have always had to depend on their sheep and ponies, and on fish from the sea. And even fishing is often interrupted by floating ice.

Another trouble of the Iceland folk has always been the great volcanoes of that island. Hecla is the safety valve of an area of millions of square miles, and its eruptions, and those of Skapta Jokull, have at times ruined half the island.

Yet the Norsemen who settled there cared for none of these things. They were free, and that was all that counted. Iceland became the center of a high civilization and the home of a bold, adventurous race who were the greatest seamen and discoverers of that early age.

The first adventure of the new colonists of Iceland was the discovery of Greenland. There is nothing wonderful in this, for in one place the coast of Greenland is no more than fifty miles from that of Iceland, and fishing vessels blown to sea naturally soon sighted it.

The first actual settler in Greenland was Erik the Red, who had been driven out of Norway for killing a man in a fight, and settled in Iceland. But the Icelanders wanted no settlers of that kind. They outlawed him, and he set sail for Greenland and found a home there. A colony was established there with Gardar for its capital, and this flourished for some four hundred years.

Though an outlaw from his homeland, Erik the Red had many friends, and among them an Icelander named Herjulf, who had a son, Bjarne, a great traveler, with a fine ship of his own. Bjarne came back to Iceland in his ship to find that his father had gone off to Greenland with Erik, so without unloading he determined to follow.

But he ran into fog with a strong north wind, and after many days' driving before the gale at last the weather cleared and they sighted land. But it was not Greenland. "In Greenland," said Bjarne to his crew, "there are snowy mountains, but this land is wooded and has small hills. Besides, we are too far to the south."

They sailed on in a northerly direction, and in two days again had sight of land, but again Bjarne was sure it was not Greenland, for here were more trees. They did not go ashore, but ran north for three days, when a third land was seen. Once more Bjarne refused to go ashore, and again turned his bows toward the north. For four days they drove before a strong sou'wester, and at last reached Greenland.

Although it is a little doubtful what were the three lands that Bjarne sighted, yet it seems fairly certain that the first was the coast of Maine, the second Nova Scotia, and the third the island of Newfoundland.

One point is beyond doubt—that Bjarne was the first European to behold any part of the American continent.

When, a few years later, Bjarne returned to Norway he told Earl Erik and others of his discoveries, and the Earl (this was not Erik the Red) told him that he ought to have landed and found out more about these new countries. Leif Eriksen, who was son of Erik the Red, was intensely interested, so much so that he bought Bjarne's ship from him, and with a crew of thirty-five men sailed away to see if he could find these lands for himself.

Now here I am going to say a word or two about the Norse longships. Some have argued that they were nothing but open boats, and that it is absurd to think that such craft could have crossed the stormy Atlantic.

This argument is absurd. The Norsemen were not only excellent navigators, but equally good ship builders; many of their ships were of considerable size and really very much better fitted for ocean travel than the tiny vessels which Columbus used nearly five hundred years later.

One of the Norse ships described in Olaf Tryggvason's saga was one hundred and forty feet long, not counting

ERIK THE RED SETS SAIL FOR GREENLAND 32
Stephen Reid

the overhang of bow and stern, and had thirty-four rowing benches. An ancient Norse ship, unearthed some years ago at Sandefiord, is seventy-eight feet long and seventeen feet wide. Columbus's flagship, the *Santa Maria,* was only 90 feet long, and his two caravels[1] were open and undecked vessels much inferior in every respect to the Norse longships.

The longships were built to rise to the sea, and they steered far more easily than the top-heavy craft in which English and Spanish seamen voyaged round the world in later days. Again, the Norsemen understood how to calculate their course by the sun and moon and how to measure time by the stars.

To return to Leif Eriksen, he seems to have made the voyage with very little trouble. He landed in Helluland (Newfoundland) and in Markland (Nova Scotia), and sailing from the latter before a northeast wind reached the mainland of the American continent. They sailed into a sound, and at ebb tide their ship grounded. The incoming tide, however, soon floated them again, and they landed.

They were so pleased with the country that they decided to spend the winter, so they took their tents and skin cots ashore and built a house. There were quantities of salmon in the river, and the grass was so good that they saw that cattle could be fed out all the winter. They noted the fact that on the shortest day the sun rose at half-past seven and set at half-past four, and from this we can place the latitude of their landing place as 41° 24′ 10″, and identify the spot as the mouth of the Taunton River in Massachusetts. Quantities of wild grapes were found, and it was for this reason that they named the country "Vinland." This discovery was made in the year 1000.

[1] See illustration on page 52.

In the following spring Leif returned to Greenland, and there was quite a sensation when he told of his expedition. His brother Thorwald was very keen about it all, so much so that Leif said to him, "If you are so interested take my ship and go and see for yourself."

Thorwald jumped at the offer, and in the year 1002 off he went to Vinland, where his expedition remained no less than three years. Alas! he never came back. He was attacked by Red Indians, and though his men beat them off Thorwald was struck to the heart by an arrow and killed.

He was buried by his sorrowing followers, and two crosses erected, one at his head, one at his feet.

And here is proof, if proof is wanted, of the truth of the discovery. In the year 1831 there was found near Fall River a skeleton in armor, and there is little doubt but that this was the skeleton of Thorwald Eriksen himself, the first European colonist of America.

The rest of the Norsemen loaded their ship with products of the new land and returned to Greenland.

But the matter was not to rest there. In 1006 Thorfinn Karlsefine, a descendant of one of the most famous of Norse families, came to Greenland from Norway and married Gudrid, widow of another son of Erik, Thorstein by name. Gudrid was a wonderful woman, famous for beauty, dignity, and prudence, and she strongly urged her husband to visit Vinland and settle there. So in the next year he, with a hundred and fifty-one men and seven women, left for the new country; they also took with them cattle and sheep. They all arrived safely, and lived there for three years. Then came such a heavy attack by the Indians that the little party could not withstand it, and were driven out.

But they left a record behind them which was found by English settlers nearly seven hundred years later.

This is an inscription on a rock on the bank of the Taunton River in Bristol County, Massachusetts. In Roman numerals we have the figures "151", the exact number of the men in the party. There is an "N", a boat, and the Runic character for "N" (Norse). Also "Nam", meaning "took possession", and the whole of Thorfinn's name, except the first letter. Translated, the inscription reads, "Thorfinn, with 151 Norsemen, took possession of this land."

The Norsemen made several other attempts to colonize Vinland, the last being in 1347. This was the year in which the Black Plague swept Europe, and also in some mysterious way reached Iceland, Greenland, and Vinland. The horrors of that time are beyond description. In Norway out of a population of two million only four hundred thousand were left alive. No surplus population was left for expeditions to America or anywhere else.

CHAPTER IV

MARCO POLO

The Dark Ages—The Decay of Geography—Ridiculous Maps—All Europe Sunk in Ignorance—The Travels of Marco Polo.

FOR hundreds of years after the final break up of the Roman Empire all Europe was split into tiny states constantly at war with one another. The arts were forgotten in the struggle for mere existence, and outside the monasteries very few people could read and still fewer write. Even the monks themselves stayed so closely at home that few knew anything of the world beyond a distance of a few miles from the place in which they lived.

Yet but for the monks all recollection of the older days and all the arts and sciences would have vanished from off the face of the Continent.

It is to the monks that we owe the preservation of chronicles of travel and geography, yet even so the monkish geography of the Middle Ages was miles behind that of an epoch a thousand years earlier. We know for instance that Otho, Bishop of Bamberg, had never even heard of the Baltic Sea, and was filled with amazement at sight of it. The only men who kept alight the lamp of travel were the missionaries, such as St. Boniface. He traveled in the North of Europe, and by desire of the Pope wrote an account of his travels.

One result, quite a natural one, was a wholesale belief in the marvelous. No story was too tall to find believers.

Every one believed in dragons that breathed fire, sea monsters that swallowed ships at a gulp, giants, sorcerers, and suchlike fables. The maps of the time are simply too comic. In some England is represented as a square; one gives Scotland as an island; in a third Ireland is

THE HEREFORD MAP, 1280

divided into two by the river Boyne. Ptolemy's maps were miles ahead of most of these ridiculous productions.

In all Europe almost the only country in which any real civilization existed was the great sea republic of Venice. The Venetians were merchants, and controlled almost all the trade of the Mediterranean. During the thirteenth century the Tartars coming out of Asia overran the whole of Eastern Europe, and the Venetians decided

to attempt to open up trade with them. It was for this purpose that two noble Venetians, Maffio and Nicolo Polo, started eastward in the year 1254.

First they visited Constantinople, where they disposed of a cargo of merchandise, and bought a quantity of jewels. With these they set sail again, and crossed the Black Sea into Tartar country, where they were kindly received. They went on eastward and arrived safely at Bokhara, then a much bigger place than it is to-day. Here a Tartar nobleman suggested that they should go with him to the Court of the Grand Khan. The latter not only received them favorably, but sent back with them one of his officers as an ambassador to the Pope.

After no less than fifteen years' absence the travelers returned safely to their home in Venice. Here Nicolo found sad news. His wife was dead, but his son Marco was nearly grown up.

This Marco is the Marco Polo who is famous as the greatest traveler of his time. It was his father who started him on this career. Taking the boy with them, Nicolo and Maffio went eastward again. This time they managed to cross the great desert of Gobi in Central Asia, and being met by the messengers of the Grand Khan were brought safely to his capital, where they were extremely well treated.

Young Marco at once set to work to learn the language, or rather languages, for there were four in use. He learned not only Mongol, but Turkish, Manchu, and Chinese. He also adopted the native dress, and soon became a most important person. The Khan actually made him governor of the town of Yang-cheu-fan.

Marco, his father, and his uncle lived for seventeen years on the western edge of China; then the two elder men at last began to wish to get home again. The Emperor would

not hear of it. "Have I not done all that was possible for you?" he asked. "Are you not persons of importance in my Court? If you desire riches they are yours for the asking. It is ungrateful of you to wish to leave me, and I will not allow it."

There was nothing for it but to sit tight and hope for some chance of getting away, and meantime Marco went off on an expedition to Farther India. While he was away a Persian prince sent to the Khan to ask for one of his granddaughters as a wife. The Khan agreed and the young lady was sent off with a train of attendants. But there was a war in Turkestan, and traveling was so dangerous that she was forced to return.

Just then Marco returned, and told the Khan that much the best and safest travel was by sea. So finally it was agreed that the princess should be put in charge of the Polo family and taken to her destination by water. Fourteen ships, each with four masts, were made ready and provisioned for two years. When the three Polos went to take leave of the Khan the old Emperor wept. He loaded them with presents, and begged them to return after visiting their families.

At last they set sail, and after eighteen months' travel safely reached Ormuz in Persia, only to find that Arghun, the Persian prince, was dead. What happened to the poor princess we do not know, but we do know that the three Venetians reached Venice again in the year 1295, having been away for twenty-four years.

At first no one would believe in them. They had been away so long that all their friends and relatives believed them dead. But when they showed their treasures of diamonds, rubies, and sapphires, and told of their experiences, the city was at last convinced, and they were feasted and fêted every day.

Suddenly came news of a Genoese fleet in the Adriatic. The Venetians hurried to meet them, and Marco was given command of a ship. The Venetians were defeated, and Marco was carried a prisoner to Genoa.

MARCO POLO LANDS AT THE CITY OF ORMUZ
From a manuscript

But Marco had a way of falling on his feet, and when he began to tell about his adventures in Asia they took him out of prison, and all the chief inhabitants gathered to listen to his story. He sent to Venice for his notes, and we believe that it was during his four years' captivity in Genoa that he wrote the history of his travels. At any rate, his book is still preserved, and Marco Polo can claim the honor of being by far the greatest traveler of his time.

I am not going to give you here a full account of these travels. Indeed, if I did so, I should have no space left for other discoverers. But I wish to point out that Marco Polo was the first European to bring back and put into

writing any real account of the Chinese Empire and of Pekin, the capital of Kubla Khan. This is important not merely because of its enormous interest to the Italians of the time, but also because it opened the eyes of Europeans to the possibility of trade with the Far East. For another thing, he gave to Europe some real idea of the geography of the East.

Marco Polo was a very keen observer, and for his time a well-educated man. He describes not only China, but parts of Siberia, which were largely, he says, great marshes frozen over and covered with snow for most of the year, but amazingly rich in furs. This part of the world he says is Ruzie (Russia), an empire of immense extent and tributary to the Mongols.

He was the very first European to give any account of Japan, which he calls Zipangu. Kubla Khan had endeavored to conquer Japan, and might have done so but for a gale which destroyed his fleet and forced the expedition to surrender. That was in the year 1264. Marco Polo visited Cochin China in the year 1280, and even went as far as Java and Sumatra, where he spent five months.

He was something of a naturalist, and describes the rhinoceros or unicorn and many other animals. He speaks, too, of sago, and how it is made from the pith of the sago-palm. Apparently he was the first man to bring sago to Europe. He even mentions the island of Madagascar, "a place from which much ivory was exported", though it does not appear that he ever visited it.

While it was at one time the fashion to laugh at the stories told by Marco Polo, modern research has made it clear that he himself invented nothing. The fables that appear in his book (and there are many) were told him by others. He himself, like Herodotus, related only what he had seen and what he had been told.

CHAPTER V

FEELING FOR THE EAST

The Portuguese as Navigators—Their Golden Age—Travels to the Gold Coast and the Cape—Prince Henry the Navigator—Bartholomew Diaz discovers the Cape of Good Hope and prepares the Way for Vasco da Gama.

PORTUGAL is a curious nation. Tucked in the side of Spain, a much larger and more powerful country, with no particular boundaries between them, the Portuguese have yet succeeded in preserving their independence through the centuries.

While visiting Portugal just before the War, I was particularly struck by the pathetic way in which the people cling to the history of their past glories. The name of Prince Henry the Navigator is on every tongue. The people love to take a stranger about to visit the wonderful ruined castles and abbeys which exist everywhere, and to tell him stories of the days when they were great buildings, rich and splendid.

It is, indeed, quite true that the Portuguese were at one time the greatest sailors and explorers in Europe. They were great fighters too. As you will remember, the Moors at one time conquered almost the whole of Southern Europe. They utterly crushed Spain and Portugal, and it was only by a last-minute victory that Charles Martel beat them back from France.

Yet it was Portugal which was the first kingdom to drive out the Moors, and not content with this the Portuguese actually pursued them to Africa, and in the year 1415 took from them the city of Ceuta. The new governor of Ceuta was Prince Henry, fifth son of King John I of Portugal.

This young Prince Henry was not only a fighting man, but also a scholar, a combination rare in days when even kings could rarely do more in the writing line than sign their name to documents. He had also a passion for the sea.

In 1412—that is, three years before the taking of Ceuta—Don Henry had sent a ship to explore the coast of Africa. This expedition was not a success, but after the prince had become governor of Ceuta he learned a deal from the Moors about the west coast of Africa, and from that date onward he sent a ship every year with orders to proceed as far south as possible and to bring back word of what the mariners found. Of these ships one got as far as Cape Bojador, but frightened by the great reefs and roaring currents her crew turned back from that point.

In 1418 John Gonzalez Zarco and Tristram Vaz Texeira, two gentlemen of the prince's household, volunteered to make an effort to double this terrifying cape and see what lay to the southward.

In those days, although sailors already had a rude sort of compass, it was still their custom not to venture out of sight of land. At night they anchored in any convenient bay. But the ship in which these gentlemen had adventured was caught in a gale and driven right out to sea. Her people had almost given up hope when the gale fell, the clouds broke away, and there, just ahead, lay the most lovely island which they had ever seen.

They landed and named it Puerto Santo, then hastened

back to tell the prince of their discovery. They told him of its lovely climate, good soil, and of the simple and inoffensive inhabitants. Their one idea was to make a settlement on it.

The prince at once fitted out three vessels and sent them with seeds, farming implements, and animals of various kinds. Among these were some rabbits, which were turned loose. Finding no enemies to keep them down, these increased so fast that within two years they had eaten up all the crops, and the new colony had to be abandoned.

Meanwhile Texeira and Zarco had remained on the island, and one very fine day they noticed on the horizon a faint cloud which they thought must be another island. So, taking advantage of a favoring breeze, they set sail, and to their great delight did find another island larger than the first, covered with beautiful woods, and quite uninhabited. This they named Madeira, and when news of the discovery was brought to the Prince he decided to avoid the mistake of populating it with rabbits, and to cultivate there the vine and the sugar cane.

The next thing that Don Henry set his mind to was the passing of Cape Bojador, and at last, in the year 1433, one of his ships, under a skipper named Gilianez, succeeded in rounding this unpleasant headland. Nine years later another of Prince Henry's men got as far as the Gold Coast, and brought back to Portugal some negro prisoners. The Portuguese had never before seen Negroes, and the excitement was tremendous.

Prince Henry had the good sense to send these Negroes straight back to their homes, and their friends in return sent some gold dust as a present to the prince.

If the Negroes had caused a sensation it was nothing to that caused by the gold, and a big expedition of six

caravels sailed to the South and reached the Guinea coast.

A number of Italians, attracted by the new trade with Africa, offered their services to Prince Henry, among them Cada Mosto, who was one of the best sailors of his time, and who also published an account of his voyages which can still be read, and which is very interesting. He tells us that the people of the Canary Islands were able to climb their native mountains like so many goats, and could leap from rock to rock over wide gorges. He says that the Arabs of the desert were utterly amazed when they saw the Portuguese ships, and at first believed that they were some sort of huge bird. Then, when the ships came to anchor and furled their sails, the Arabs came to the conclusion that they must be some sort of giant fish which the strangers had succeeded in taming to do their bidding.

For fifty years Prince Henry encouraged all sorts of maritime enterprise, and well he earned his name of "the Navigator." To this day there is no ruler whose name is better remembered by his people. Every schoolboy in Portugal can tell you about Prince Henry, and in Oporto they point out the house where he once lived.

Alphonso, who succeeded Henry, was too busy fighting Spain to do much in the way of helping trade, but when he in his turn was succeeded by King John II, then discovery was resumed at once. This king formed the idea of crossing Africa to India and making an alliance with the so-called "Prester John", who was supposed to be the ruler of the East.

You must remember that neither King John nor any of his people had the least idea that it was possible to sail round Africa to the East. None of them had ever so much as heard of the Cape of Good Hope, and the general

idea was that India was joined up in some way to Africa.

In the year 1486 an expedition was fitted out consisting of two caravels and a store-ship, and the command given to a Portuguese gentleman named Bartholomew Diaz. I have spoken already of the small size of most of the ships in which explorers set sail. These two caravels were mere cockleshells of fifty tons apiece, and from our point of view hopelessly unseaworthy.

Diaz was instructed to sail down the coast of Africa, and if possible make his way to India. Having reached a point nearly three hundred miles beyond the farthest place yet charted by any navigator, Diaz with a bravery beyond praise steered due south, and was soon out of sight of land. Gale after gale forced his wretched little ships first southward and then to the east, and when at long last he sighted land it was very different land from the steamy swamps which his crews had last seen. Here were great hills and slopes of grass on which sheep could be seen grazing.

Although Diaz himself had no idea of it he had doubled the Cape, and was already a hundred miles beyond it. He sent ashore Negroes whom he had brought with him, ordering them to make inquiries for Prester John, but the natives fled inland, and it was impossible to get speech with them.

Meantime the store-ship was missing, and was supposed to have been sunk, provisions were running very low, and Diaz' crew were so frightened that they were near to mutiny. Diaz managed to get them as far as the mouth of the Great Fish River, then they struck, and though he begged them to go on, even another twenty-five leagues, they would not, and very sorely against his will Diaz had to turn back.

On their way back they sighted the Cape, to which Diaz gave the name of Cabo Tormentoso, or the Stormy Cape. It was the king who changed this to the name it now bears, the Cape of Good Hope.

This wonderful voyage of Diaz paved the way for the great achievement of another Portuguese voyager, the well-remembered Vasco da Gama. It was in the month of July, 1497, that Da Gama left Portugal. He had three vessels, but the size of them may be gathered from the fact that their crews numbered but sixty men in all. He got on very well until he reached the Cape, but there met such heavy head winds that his men wanted to turn back. But Da Gama had a way with him, and managed to induce them to carry on, and as soon as they were once round the Cape the weather improved.

On and on they went, always hugging the coast, until at last they fetched the big island of Mozambique, which at that time was inhabited by Moors. These people at first were quite polite, but as soon as they found that the visitors were Christians they plotted to massacre them all. Da Gama luckily got wind of the plot, and set sail in a hurry. Reaching Zanzibar, he found the inhabitants more friendly, and here in the harbor he found ships from India.

Imagine his excitement. At last the problem was solved; the all-sea route to the East was open!

Da Gama lost no time in getting hold of an Indian pilot, and at once set sail. The weather must have been particularly favorable, for it took his little fleet only twenty-three days to reach Calicut—that is, the great port which we now call Calcutta. Though he well knew the danger of doing so, he went ashore, accompanied by twelve resolute men, and was received in great state. But this sort of thing did not blind him to the fact that the Mohammedans,

who were in great force in India, were deadly jealous of any possible rivals in the rich carrying trade of the East.

Already these merchants had set it abroad that the strangers were pirates.

Again Da Gama had the good sense to see in time that trouble was brewing, and going straight to the Rajah he managed to persuade him that he would gain great advantages from alliance with the Portuguese. Then as soon as ever he had obtained the necessary papers he set sail. In September, 1499, he was back in Lisbon, where the king gave him a magnificent reception and created him Admiral of the Indies.

CHAPTER VI

A BORN ADVENTURER

The Travels of Ludovico di Bartema—His Pilgrimage to Mecca and his Description of Unicorns—His Journeys into Persia and India and the Islands—Seven Years of Peril and a Safe Home-coming.

SOME men travel for gain, some for the sake of science, but now and then you find one who is a born adventurer, a real rolling stone, who, as an old chronicler says, "fixes his mind on beholding with his own eyes some unknown part of the world—where places are, what is curious in their peoples, their different animals, and what fruit-bearing and scented trees grow there." Ibn Batuta, whose story I have already told, was one of these, and later he had a worthy successor in a certain Italian gentleman named Ludovico di Bartema.

Bartema was a native of the city of Bologna, and he not only traveled, but wrote the story of his travels. He was a man of cool courage, with much resource, and although extremely plucky, yet with plenty of native cunning. We gather from his own story that he was very strong in body and active, and able to endure hardships which would have killed a weaker man.

Of his early days we know nothing. His story begins, so far as we are concerned, in the year 1503. At that date the Turks owned the whole of the eastern end of the Mediterranean, and between them and the still powerful

republic of Venice there was much trade. Still, it was no easy matter for any European to travel through the East, for the Mohammedans, then as now, hated the Christians, and were apt to give short shrift to any found off the beaten track.

But Bartema cared for none of these things, and early in January, 1503, he reached the great port of Alexandria. "Yearning for new things," he writes, "as a thirsty man doth for fresh water, I entered the Nile and arrived at Cairo."

Cairo was smaller than he had thought. It and all Egypt were at that time under the rule of the Mamelukes. In all the history of the world there has never been a stranger rule than that of the Mameluke soldiery. They were recruited chiefly from children of Christian descent, stolen when young, and carefully trained in the Moslem faith. They were also trained in all sorts of fighting. They were the boldest, strongest soldiers of their time, as well as the proudest and most cruel.

From Cairo Bartema went north to Beyrout, and thence to Aleppo and Damascus. At Damascus he found the houses shabby and dirty outside, but inside splendid with marble columns and fountains. Here, as in Egypt, the Mamelukes were all-powerful. When a Moor met a Mameluke he had to bow to him, and if he failed he was at once seized and bastinadoed. Bartema says that there were many rich Christian traders in Damascus, but that they were ill-treated by the Moslems. He gives all sorts of interesting little descriptions of the town, telling us, for instance, that long-eared goats were brought up three flights of stairs to be milked for his meal.

Bartema now made up his mind that he must see Mecca, the center of the Mohammedan faith, and which even to-day is yearly visited by thousands of pilgrims from all

parts of the East. Anything more dangerous for a European than a visit to Mecca could hardly be imagined, and Bartema knew that there was only one possible way of doing it, which was to profess conversion to the Mohammedan faith. He had already learned to speak Arabic, and had made friends with the captain of the troop of Mamelukes who were to escort the pilgrims through the desert.

How he managed the business we do not know, but manage it he did, and on the 8th of April, 1503, he started with a caravan of forty thousand people and thirty thousand camels. To escort this huge army of pilgrims a little force of only sixty Mamelukes rode with them.

For days they marched across the desert. Sometimes water was so scarce that they had to dig for it, and usually while busy about this they were attacked by marauding Arabs. "The land," says Bartema, "is wholly dry and barren, and in one valley thirty-three of our company died of thirst and were buried in the sand."

At one place they found a cistern and drained it dry. Next morning twenty-four thousand Arabs rode up and demanded payment for their water. The Mamelukes refused, and the Arabs attacked and besieged them two days and two nights. By that time there was no water left at all, either for the pilgrims or the Arabs, so the Mamelukes decided to attack. The fight ended in a complete victory for the Mamelukes. Amazing as it sounds, the pilgrims lost two men only, while no fewer than six hundred of the Arabs were killed.

For five days the pilgrims marched through a desert of pure white sand, where, says Bartema, "if by mischance the wind blow from the south all may be reckoned as dead."

When at last Bartema reached Medina, he did not think much of the place. "All around," he says, "the land lies

barren and under the curse of God." He spent three days in seeing Medina, then went on to Mecca, where he visited the great house of Allah and the sacred well Zemzem, in the brackish water of which the Moslems wash to cleanse themselves from their sins.

But the most interesting things which Bartema saw at Mecca were two unicorns. Now, in spite of the fact that the unicorn figures in the arms of England, it has always been believed to be a fabulous animal. Yet Bartema, whose book proves him to have been a careful and truthful observer, gives a very clear description of the animals.

"Now I will tell you of their make," he writes. "The elder is shaped like a colt of thirty months, and he has a horn on his forehead about three arm-lengths. The other is like a colt of one year, and his horn is the length of three hands. The color is dark bay; the head like a hart's, but no long neck; a thin short mane hangs over one side; the legs are slender and lean, like a goat's; the foot a little cloven, long, and much like a goat's, with some hair at the back of the legs. Truly, this monster must be a very fierce and rare animal."

So far as we know, Bartema was the first European Christian to reach the Holy Cities of Arabia, and although since his day others such as Sir Richard Burton have been there, they have all traveled by the shorter route up from the Red Sea.

Bartema had no idea of returning to Damascus with the caravan, but on the other hand knew that it was certain death to remain in Mecca unless he could find some friend to hide him. Bartema was the sort who never lacks for friends, and somehow he persuaded a Moorish merchant to give him shelter in his house. A caravan was leaving Mecca to go to Jeddah on the Red Sea, and Bartema man-

aged to slip out of the town with this. But even at Jeddah he was still in danger, so took refuge in the mosque, and lay there in a corner, covered with a blanket and groaning as if in great pain. It was only at night that he could steal out to get a little food.

After seventeen days he managed to smuggle himself aboard a ship bound for Persia, and so arrived at Aden. Here he had his first stroke of bad luck. A sailor called him a "Christian dog", and he was at once arrested as a spy, and hauled off in irons and clapped into gaol. He had spent two months in a horrible prison when a message came from the Sultan of Yemen to bring the supposed spy into his presence. This meant an eight days' journey inland to a place called Radaa.

When brought into the Sultan's presence Bartema knew that he was in a very tight place. But his usual presence of mind did not forsake him, and he managed to persuade the Sultan to spare his life. He was again imprisoned, and kept there for three months with nothing to eat but a little millet bread and not even enough water to quench his thirst. Then it occurred to him to play an old trick. He pretended to be mad. Madmen are to this day looked on with reverence in the East, and Bartema was released from prison and allowed to wander about; but he had no money, no food, no clothes except a shirt.

Another man might have despaired, but not Bartema. He managed to attract the attention of the Sultana, who kindly gave him food and clothes, and who persuaded the Sultan to strike off his irons and allow him to go where he pleased.

So once more he started his wanderings and traveled through many Arabian towns. In the end he got back to Aden, where he smuggled himself aboard ship, and in December, 1503, arrived at Zeiba, a port on the African

coast opposite to Aden. Here he was weather-bound for a while, and had time to notice the great slave trade that went on through this port. The Arabs raided Christian Abyssinia and brought out prisoners for sale in Egypt, Arabia, and India.

As usual, he made friends with the captain of the ship, and presently sailed in her for the Persian Gulf. He visited Ormuz, where he saw the pearl fishers at work. He says that the diver tied a big stone to his feet and went down fifteen paces into the water. There he stayed as long as he was able, filling a bag with the pearl oysters.

At Ormuz Bartema left the ship, and wandered all through Persia. In all he must have traveled some fifteen hundred miles through that country. He stayed some time at Herat, and from that town came back to Shiraz, which was the great market for turquoises, rubies, musk, and ultramarine. He mentions particularly that the musk is adulterated by the Persian merchants, "who are master-hands for intellect and misleaders beyond all other people."

Still anxious to see new countries, our hero set off for Turkestan. He could hardly have had a pleasant journey, for civil war was raging between the two Mohammedan sects, the Sunnites and the Shiites. The land was dreadful with flame and slaughter. In the end he was driven back to Ormuz, where he took ship for India, and presently arrived at Cambay in Gujerat, a great center for the export of cotton.

Gujerat was ruled at that time by a terrible person called the Sultan Muchamuth, captain of an army of twenty thousand horsemen. He lived in great state. Each morning when he arose fifty elephants, each with his mahout, came to the palace to do him reverence, and when he ate fifty or sixty different kinds of music played to him. His mustache was so long that he tied the ends

up over his head, "as a woman doth tie her tresses." But the most extraordinary story which Bartema tells us of this ruler is that he ate poison daily so as to become poison proof, and had only to spit at a foe and death followed within half an hour.

Coasting all round India, we next find our adventurer at Narsinga, then a great capital, with a Sultan who boasted forty thousand men and four hundred fighting elephants, all armor-clad and carrying great swords in their trunks. The Sultan's horse wore jewels worth more than some cities. Bartema tells us much about the elephants, which interested him greatly.

From Narsinga Bartema went to Calicut, then a mean-looking town, though a great center of trade. He speaks of the many idols which were washed each morning in perfumed water, and of how the Brahmins "lie flat on the ground and do roll their eyes in a devilish way." Life and property were very safe, but some of the laws were odd. If a man owed money, and could not or would not pay, the creditor drew a circle round him with a green bough, and in this he was forced to stay until he "paid or perished." When two States went to war a few soldiers were picked from each side and fought until four or six on each side were slain. Then honor was satisfied and peace made.

Bartema tells us about crocodiles, a "kind of reptile as big as a boa, but with a greater head. It has four feet and is four cubits long. . . . It does evil to folks by its bite." Ceylon was his next point of call. The great island delighted him, with its cinnamon, its roses, its great herds of elephants.

We have not space to follow all the wanderings of this amazing traveler, who soon reached Burmah, where the king gave him some rubies. He visited Pegu, being per-

haps the first European to arrive there. Thence he took ship for Sumatra, where he saw houses roofed with the shells of the giant sea turtle and found many Chinamen trading. Malacca, Java, and other places were visited, and then the Nutmeg Islands, where dwelt "a beastly kind of men without king or even governor—so stupid that they could not do evil, even if they would."

In Borneo, his next stop, the people, he says, were pagans, but good folk. In Java there were several kings and many religions. Bartema says, too, that some of the natives were cannibals.

By this time our traveler was south of the Line, and much astonished to find that his shadow fell the opposite way from that in northern latitudes, "and thereby", says Bartema, "we learned how far we had come from our country, and stood amazed."

In Java Bartema and a merchant friend hired a junk, and sailed to Cochin and Quilon; from there they returned to India, landing at Calcutta. Here he found himself without money, so turned doctor, and he tells us exactly how he cured one unhappy patient who seems to have eaten too much, and was suffering severely from indigestion.

After many adventures in India we find Bartema in a Portuguese ship fighting with the Moors and helping to defeat them. This sea fight took place in March, 1506, and our Italian was rewarded by being made head of a Portuguese warehouse. In November, 1507, Bartema helped the Portuguese to attack Ponani, a port to the south of Calcutta. There were only six hundred Europeans, and they were opposed to a force of eight thousand Indians. But the natives had no chance against the small but well-disciplined force, and were defeated with terrible loss of life.

In December, 1509, Bartema started back for Europe in a Portuguese ship. They touched at Mozambique, where they were chased by elephants, and got away only by the skin of their teeth.

After the Cape was rounded Bartema's ship was nearly wrecked in a terrible storm, but at last reached St. Helena, where they sighted whales, "each as great as a great house." They also visited the island of Ascension.

And so at last our adventurer returned to his fold, after seven long years of travel, and under the protection of Pope Julius II wrote the story of his travels, which was published in the year 1510.

CHAPTER VII

EARLY VOYAGES OF COLUMBUS

The Story of Columbus—His Early Voyages—Terrible Difficulties—His Great Voyage and Discovery of Cuba—The Storm—His Arrival at the Azores—His Return.

THAT Christopher Columbus was by no means the first European to reach the shores of the New World is now generally recognized on both sides of the Atlantic. We know, indeed, that Columbus himself was probably quite aware of the previous discoveries of the Northmen, for from a letter of his, which is quoted in Washington Irving's "Columbus", we learn that the great navigator visited Iceland in the year 1477, no doubt with the object of getting information for his proposed voyage to the West.

Yet this fact does not in any way lessen the glory of his great feat. From any point of view, Columbus was one of the greatest discoverers that ever lived, and this must always be remembered to his credit, that his motive was not one of mere personal gain. In this respect he stands above nearly all the other adventurers of his day.

We do not know a great deal about the early life of this wonderful man, but he is believed to have been born in the Italian city of Genoa in the year 1447. His father, Domenico Colombo, was a cloth weaver fairly well-to-do, and he sent his son to the University of Pavia. Here the

lad did well in geometry and astronomy, and was particularly interested in geography. The sea seemed to draw him like a magnet, and when only fourteen years old he became a sailor. Whether he went to the university before or after his first voyage is doubtful, but in those days the university was more like an ordinary school than the university of to-day.

AN ASTROLABE

Columbus not only sailed, but he fought. Once he went to Tunis in command of a ship of war to cut out a galley captured by the Moors, and in or about the year 1470 he was in a sea fight off Cape St. Vincent, and losing his ship was washed up on the coast of Portugal on a plank.

As I have already mentioned, at that time a number of adventurous Italians had settled in Portugal and were employed in the African trade. The brother of Christopher, Bartolomeo, was among them, and was earning his living as a maker of maps and charts. So Columbus himself settled down, and presently married Donna Philippa, the daughter of Pedro Perestrello, a famous pilot who had been engaged by Prince Henry to help in the colonization of the island of Puerto Santo.

This made the discoverer free of all the charts and papers of his father-in-law, and we may take it that he met in Lisbon scores of the most famous adventurers of the day. I think that those must have been the happiest days of his life. It was while he was in Lisbon that Martin Behaim first suggested the use of the astrolabe for the purpose of observing the latitude when out of sight of land. Columbus jumped at this discovery, and was the first to use it and

to frame tables and rules for fixing the position of vessels by latitude and longitude.

During those years he was taking constant voyages. He not only went to Iceland, but to the Cape Verde Islands, to Sierra Leone, and elsewhere. Perhaps it was at sea, perhaps while living in his house at Lisbon, but it was during this part of his career, and about the year 1474, that Columbus first conceived the great idea of trying to reach India by sailing to the west instead of round the shores of Africa.

The next thing was to find some one to finance the expedition. You might have thought that at this time, when the stir of new discovery was in the air, Columbus would have had little trouble in getting some one to put up the money to equip an expedition. But this was not the case. The fact was that, although there were vague rumors abroad of a great continent to the west, few had the slightest faith in them, and Columbus was looked on as a crack-brained dreamer. Then, again, all the available money that could be spared for such enterprises was being spent on the exploration of Africa. Europe, remember, was very poor in those days.

At last Columbus did get an interview with King John, and so earnest was he that the king called a council to discuss the project. The council recommended that a ship should be secretly sent to see if there was any truth in the story. The ship was sent, but came back without doing anything; and when Columbus discovered this piece of trickery he was so angry that he made up his mind that Portugal should have no share in his discovery.

He sent off his brother to England to interview King Henry VII, and he himself traveled to Spain to see what the Spanish authorities would do for him.

And now comes one of those curious chances which,

small in themselves, so often change the whole course of history. Bartolomeo on his voyage to England was caught by pirates, and so long delayed that it was a very long time before he reached London. When at last he did gain audience with Henry, he found the latter quite willing to listen to his plans, and he set off home again, only to find that it was too late—that his brother had already started. But for this bit of ill-luck, it is probable that England, not Spain, would have discovered the West Indies, and have reaped the immense benefits of that discovery.

Yet I would remind you here that the great riches which flowed into Spain from the Americas were no blessing to her, but rather a curse. Her people grew fat and lazy, and the poverty-stricken State of Spain to-day is the direct result of those tons of gold which were wrenched from the unfortunate peoples of the New World.

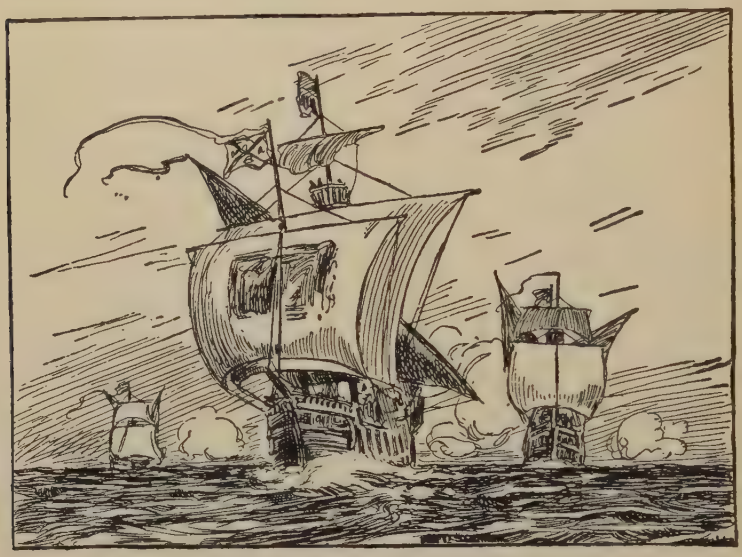
To return to Columbus himself, he had the greatest difficulty in getting a hearing in Spain, and even when he did met with such doubts and suspicions that at last he became thoroughly disgusted, and decided to leave the country and try his luck in France. He had actually started and traveled some distance when a courier caught him and requested him to return. The queen wished to see him.

If Spain is to have credit for sending forth Columbus on his great voyages of discovery, that credit is due almost entirely to the wise Queen Isabella, who, rather than allow another Power to claim him, decided to pay for Columbus' expedition out of her own private purse.

On the 19th of April, 1492, the articles of agreement were signed which provided that Columbus should be made Admiral and Viceroy of all new lands and seas that he might discover. The expedition was fitted out at the port of Palos. It consisted of three ships, the flagship being the *Santa Maria,* the second, commanded by Alonzo Pin-

zon, being named the *Pinta,* while the third, under Yañez Pinzon, was the *Niña.* Francesco Pinzon, a third brother, was pilot of the *Pinta.*

It was on Friday, the third day of August in the same year, that the little expedition that was to mean so much to the world set sail, and made straight for the Canaries. Here they took fresh water and food, then set their course



THE SHIPS OF COLUMBUS

westward. The wind was light, and it was two days before they lost sight of land. And very soon Columbus found himself facing the same sort of trouble which all sea captains of the time had to put up with. His men, once out of sight of land, began to suffer from nerves. Some were so scared that they actually wept, and it took their captain all his time to encourage them.

On the 11th of September they passed the mast of a ship floating on the sea, and on the 15th they saw a great fire ball, a meteorite, fall hissing into the water. Soon they

ran into a stretch of sea that was covered with floating weed. This was part of the Sargasso Sea, a huge eddy in mid-Atlantic where the weed gathers thickly. They also saw birds, and made sure that they were not far from land. They sounded, but a hundred fathoms of line found no bottom. Small wonder, for there were about two miles of water beneath their keels. Later they saw a whale.

On the twenty-first the wind, which so far had been favorable, veered westerly, and the men, declaring that at last they had a breeze which would take them home, began to get out of hand altogether. Some actually proposed to throw their commander overboard and turn back. It is difficult to imagine how Columbus managed to keep them up to the collar. He could hardly have slept, and there was not a day from then onward that he was not in actual danger from mutiny.

On the 1st of October many birds were seen, and the ship was surrounded by fish, and on the fourth a bird came so close that a seaman killed it with a stone. Although they took the sight of the birds as a proof that land was not far off, yet every day the men gave more and more trouble. Columbus kept his temper and spent most of his time in heartening up his cowardly followers. On the eleventh of the month signs of land became more definite. A reed quite green floated past, and the people of the *Pinta* picked up a bamboo and a piece of carved wood.

That night, as the crew assembled for evening prayer, their leader told them that land was near, and promised a suit of velvet and a pension to the first who sighted it.

About ten o'clock Columbus himself, sitting at the stern of the vessel, saw a light, and pointed it out to Pedro Gutieres. They called to Sanchez de Segovia, the armorer, and he too saw it. At two in the morning the *Pinta,* which was in the lead, made a signal that she could see land, and

so after a voyage of thirty-five days the New World was discovered.

What a triumph for Columbus! Yet if ever a man deserved his success, this was he. You can imagine with what feverish anxiety he and all his people waited for the dawn. At last it broke, and there before them lay mile after mile of lovely shores with green hills sloping to the deep blue of the tropic sea. Small wonder that the crew of the *Pinta* which led the van began to chant the *Te Deum.*

Columbus landed in great state, carrying the royal standard of Spain; a crucifix was erected, and Columbus took possession of the new land in the name of the King of Spain, with an almost comical disregard of the fact that the rightful inhabitants of the island stood round in crowds, staring at the bearded strangers, and wondering greatly in their simple souls what it was all about. The island was named San Salvador, a name which it still bears. It is one of the Bahamas, and though it was for long Spanish it and the whole of the big group to which it belongs are now British. It is pleasant to relate that Columbus' crew, once they discovered that he was right and they wrong, assembled to beg his forgiveness for their lack of faith.

Some of the natives of the island wore small ornaments of gold, and when asked where they got these pointed to the south. Columbus and his men lost no time in sailing off in this direction, and passing many small islands at last reached the great island of Cuba. It sounds almost comic to us, but Columbus at first thought that this was really Cipango, or Japan, and he put ambassadors ashore to search for the great Khan of Cathay. The natives were badly frightened, and it was very difficult to get anything out of them. The only interesting information that was gathered was that, although there was some gold in Cuba, there was much more in another island.

COLUMBUS AT THE COURT OF SPAIN

R. Balaca

THE DEATH OF COLUMBUS

F. Ortego

Once more Columbus set sail, and the *Pinta,* which was the fastest of the three ships, drew so far ahead that she was lost sight of. Columbus, with his two remaining ships, presently reached another very large island called by the natives Haiti, but which Columbus renamed Hispaniola. The name has; however, since been changed to San Domingo.

The Spaniards found it very difficult to get into communication with the natives, who were as timid as those of Cuba. But chance came to their aid. They saved an Indian whose canoe was upset, and who was on the point of drowning. Columbus ordered him to be given food and taken ashore. The man, who was evidently grateful, told his friends how well he had been treated.

The result was startling. Hundreds of the natives crowded to the beach, bringing bananas and other fruits; but what chiefly interested the Spaniards was the fact that they brought gold ornaments in considerable quantities.

Columbus himself went ashore and visited the Cacique, whose name was Guacanagari. Inquiring from him as to where the gold was to be found, the chief told him that it came from a country situated farther to the east, and called Cibao.

Columbus therefore sailed for the purpose of finding these gold mines, but a dreadful disaster upset his plan.

On Christmas Eve, at eleven at night, his own ship, the *Santa Maria,* struck a reef and was totally wrecked.

Columbus, with his crew, got away in boats to the *Niña,* Guacanagari himself came to the rescue and helped to save most of the goods from the wreck.

This accident changed all Columbus' plans. He applied to the chief for permission to make a settlement on the island, which was readily granted, and a fort was built out of the timbers of the wreck. Here Columbus left

thirty-eight men. Then on the 4th of January, 1493, he again set sail, in order to finish his survey of the north coast of the island.

Here he met Pinzon with the *Pinta*. Now Pinzon, without a doubt, had purposely left the other two ships so that he might be the first to find the land of gold.

Columbus knew this, but knowing also that this was no time to quarrel pretended to be satisfied with the excuses made by Alonzo Pinzon. He decided to go straight home, and the two ships started on the 16th of January. They made for the Azores, but when close to the islands a tremendous gale struck them, and the *Pinta* was again lost sight of.

The tiny *Niña* was in terrible danger, and even Columbus himself gave up hope. The idea that no news would reach Europe of his great discovery was what affected him most deeply; and he took the only means that remained to preserve the memory of it. He wrote a short account of his voyage on a leaf of parchment, put it into a tightly sealed cask, and flung it overboard.

Hardly had this been done before the wind fell as quickly as it had risen, and on the 16th of February the *Niña* reached the Azores.

Even now the troubles of Columbus were not at an end. Another storm came up, and it was not until the 15th of March that the *Niña* reached Palos, the same port which she had left seven and a half months earlier. A day or two later the *Pinta* came safe to land, but the traitor Alonzo Pinzon was very ill and died within a week.

Columbus' journey to the Spanish Court was like an old Roman triumph. Thousands of people gathered to see the man who had discovered a new world. The Indians whom he had brought with him, and who were dressed in their native costume, created an enormous sensation.

King Ferdinand and Queen Isabella received Columbus in state, seated on their thrones. Columbus knelt before them, but the king took him by the hand, and made him sit between them while they listened to his story.

He granted to the explorer all the rewards that he had promised, making him Admiral of the Indies, and permitting him to join to the arms of his own family those of the kingdoms of Castile and Leon. Preparations were at once made for a second expedition.

CHAPTER VIII

LATER VOYAGES OF COLUMBUS

The Second Voyage of Columbus—His Discovery of the Caribbean Islands—His Abominable Treatment at the Hands of Bobadilla—His Third and Fourth Voyages—His Disasters and his Death.

THE outfitting of Columbus' first expedition had been a most difficult matter, owing to the very small amount of money which was all that the queen had been able to furnish. But the success of that first voyage had made an enormous change. Money flowed in, so did men, and a fleet of seventeen vessels was quickly fitted out. They were manned by about fifteen hundred men, and carried also cattle and domestic animals, plants and seeds, for the new colony.

At dawn on the 25th of September, 1493, the fleet set sail from Cadiz. All went well, and on the 2nd of November a new island was discovered. This was Dominica, one of the group now called the Lesser Antilles, which lie off the northern coast of South America. At that date those islands were inhabited by Caribs, a race of fierce fighters of whom Columbus had already heard from his friend the Cacique of Hispaniola. The word "Carib" is from the same root as "cannibal", and the survivors of the race are still found in the northern part of the South American continent, and some tribes have even now the reputation of being man-eaters.

While Columbus' fleet passed along the Antilles, fleets

of Carib canoes attacked them, and chroniclers of the time tell how savagely these people fought—the women as desperately as the men. At Guadeloupe, one of the largest of this group of islands and now a French possession, the Spaniards tasted for the first time the pineapple. They also saw with horror human legs and arms being roasted before huge fires.

Leaving this unpleasant island, Columbus went northward again, and on the 22nd of November reached Hispaniola. Here a sad disappointment awaited him. Not a sign remained of the thirty-eight men whom he had left as colonists, while the fort itself was in ashes. I may here say that the fault lay with the Spaniards and not with the natives. The moment Columbus left them these men had thrown off all restraint, and had treated the natives in so shocking a fashion that the latter, in mere self-defence, had been forced to destroy them.

Very wisely Columbus decided to leave this ill-omened spot. For his new settlement he chose a harbor not far from the mountain of Cibao, the same hill that was believed to contain gold. Here he founded a city which he called Isabella, where he built a stone church and left a number of his people. In charge of the new colony he set his brother Don Diego, then on the 24th of April, 1494, he himself set sail again with three small vessels.

You must remember that all this time Columbus had been under the impression that these new islands which he had discovered lay off the coast of Asia. It is, of course, this blunder on his part which has resulted in the natives of America being known as Indians. There is still in existence a curious document, drawn up by Columbus himself and signed by every individual aboard his fleet, expressing the positive belief that Cuba was a continent and a part of India.

With his three ships Columbus sailed round the eastern point of Cuba, then turned along the southern shore. The natives were most friendly. As usual, the principal inquiries of the Spaniards were as to the whereabouts of the land of gold. These natives all had the same story, that the precious metal came from the south. So Columbus sailed south, and on the 3rd of May discovered Jamaica. Here, however, there was no gold to be found, and he returned to the coast of Cuba. Along this he coasted for a considerable distance, and finding that the land still ran westerly felt more certain than ever that this was part of the coast of Asia.

If he had voyaged a few miles farther he would have reached the western end of the island and discovered his mistake, but the weather was bad, his little ships were leaking, and he himself was ill—so ill that he lay insensible, and his crew, believing that he was dying, brought him back to the harbor of Isabella.

A little time after Columbus had set out on his voyage to Cuba his brother Bartolomeo had arrived at Isabella. Bartolomeo was a strong man, and also a famous sailor. It is believed that he accompanied Diaz in that celebrated voyage to the Cape which I have already described. His presence was a great boon to the Admiral, and did more than anything else to make him well again.

But fresh trouble was brewing. Many of those who had come with Columbus from Spain were mere adventurers, the sort of people who take everything and give nothing. Founding a new colony is never a soft job, and finding that they had to work hard for a bare living these fellows had turned on Columbus. Matters had come to such a pitch that some of the rebels had seized a couple of vessels and set sail for Spain.

The head of these was Friar Boyle, a Franciscan monk

who seems to have hated Columbus bitterly and who, on arriving in Spain, lost no time in making a complaint at Court. The result was that a commissioner was sent out to report on the state of the colony. This man, Aguado, was also bitterly hostile to Columbus, and Columbus himself, realizing the trouble that his report would cause, made up his mind to accompany him back to Spain.

Arrived at the Spanish Court, Columbus made out a good case. He explained his difficulties and succeeded in convincing the king. Fresh supplies of men and stores were sent to Hispaniola, while Columbus himself set to work to fit out a third expedition. Money was scarce, and it was two years before the Admiral was able to make a start.

It was on the 30th of May, 1498, that Columbus set out with six ships. This time he steered farther to the south, and ran into stifling calms five degrees north of the Line. The heat was so intense that he turned in a northwesterly direction, and on the 31st of July sighted peaks. These were the three mountains of the island of Trinidad. Keeping to the south and west of this island, he met a rapid current running toward the north, and realized that he must be nearing the mouth of a great river. This was actually the Orinoco, the second greatest river in South America, and which in flood time has a width of a hundred miles. With some difficulty the ships crossed the Dragon's Mouth, the channel running between Trinidad and the mainland, and reached the coast of South America. Here again the natives were very shy, but by stratagem the Spaniards captured two of them, and then sent them ashore loaded with presents. In this way Columbus made friends with the people, and got from them a quantity of pearls.

Leaving the Orinoco, Columbus made again for His-

paniola. Here matters were worse than ever. Civil war was raging. With great difficulty Columbus pacified the insurgents, but although outwardly there was peace, yet every ship that sailed for Spain carried fresh complaints.

It must be remembered that the great successes of Columbus had made many enemies for him at the Court of Spain. These at last gained the ear of the king and convinced him that the new colony was in danger of destruction. It was therefore decided to send out a new Governor-General. This official, Francisco Bobadilla, was a man of no character and of evil temper. His one idea seems to have been to make himself as unpleasant as possible. When he arrived in Hispaniola he at once arrested Columbus and his brothers, and sent them home in irons.

When the great Admiral arrived in Spain, still loaded with irons, the people at large were furious. The queen, who had always been his good friend, was full of sympathy, and the king, although he had never been too well disposed toward Columbus, was forced to give way to the tide of popular feeling. The Admiral and his brothers were set at liberty and received at Court; Bobadilla was recalled; but although Columbus begged to be reinstated as governor the king refused his request, and Don Nicholas de Ovando was chosen to succeed Bobadilla.

Columbus' entreaties to be placed at the head of a new expedition were also neglected, but chance favored him. Just before his return from Hispaniola Vasco da Gama had returned to Lisbon after his celebrated voyage to India, and his account of the riches of the Indies had created tremendous excitement in Europe. Columbus now offered to conduct a fleet to the Indies by a shorter route than that round the Cape of Good Hope.

By this time Columbus had abandoned his original idea

LANDING OF COLUMBUS
Stephen Reid

that Cuba was part of Asia. What he did believe was that a strait leading into the Indian Seas lay somewhere in the direction of Darien.

Spain, anxious to keep pace with Portugal, decided to give Columbus the chance he asked for, and on the 9th of May, 1502, the great Admiral sailed on his fourth and most unfortunate voyage. On this occasion his fleet consisted of only four small caravels, the largest being barely seventy tons. On the 15th of June he reached Martinique, one of the Windward Islands. He had been advised by the king and queen not to visit his colony in Hispaniola, but one of his ships was so bad a sailor that he resolved to take her to Isabella in the hope that he might be able to exchange her for a more seaworthy craft.

An unpleasant surprise was in store for him, for Ovando flatly refused to allow him to land.

At this moment a large fleet lay in the harbor of Isabella, laden with all sorts of treasure, and ready to sail for Spain. A hurricane was brewing, but Columbus was the only man who recognized the signs. He sent ashore an urgent message to Ovando, warning him of the danger, but Ovando chose to neglect the warning and dispatched the fleet. The hurricane broke, and of the whole fleet only one ship remained afloat; that oddly enough was a small caravel in which had been shipped the Admiral's own private property which he had left on the island.

The result was that the enemies of Columbus accused him of black magic. As soon as the hurricane had blown itself out Columbus set sail again, and reached the island of Guanaga on the coast of Honduras.

Here he found natives who worked in copper, and wore cotton garments. He reached the coast of Honduras, where for the first time he saw monkeys *with tails,* and peccaries, or American pigs. The chief gave him three of these pigs,

which he says were so terrible in appearance that they would "frighten an Irish dog."

The natives told him of a great empire lying to the west, and described its riches and its high state of civilization. This of course was Mexico, and had Columbus made up his mind to visit it, the whole course of history might have been changed. But full of his idea of discovering the strait leading to India, he kept along the coast in the opposite direction, toward the Gulf of Darien. Storm after storm arose, the natives were hostile and fought so furiously that several of Columbus' men lost their lives.

The three wretched little ships were leaking like sieves, and even Columbus' seamanship was taxed to keep them afloat. Columbus himself was ill, and his men, angry at his persistence in seeking the strait instead of searching for gold, were on the point of mutiny. There was nothing for it but to return, and on the 5th of December they sailed from El Retrete. Caught in fresh storms near Jamaica, in order to prevent their foundering, the Admiral was forced to run his vessels on shore. Here the natives at first were friendly, but presently getting tired of their visitors refused them food. Famine threatened. The only hope was to get assistance from Hispaniola, and two of Columbus' men set out in a canoe and safely reached the other island.

Ovando, however, had always been jealous of Columbus, and purposely delayed sending help. Matters looked bad. Some of Columbus' men actually mutinied, but his brother Bartolomeo defeated them and captured the ringleader. But by this time news of Columbus' sufferings had become public property in San Domingo, and the colonists there became so indignant that Ovando was at last driven to send help; so after a whole year of semi-starvation and misery the great seaman at last arrived safely at San Domingo.

For a time Columbus was very ill indeed, but at last was

able to set sail for Spain, where he arrived on the 7th of November, 1504.

Back in the country for which he had done such great things, Columbus discovered that his good friend, Queen Isabella, was dead. The great Admiral found himself broken in health and almost penniless. He petitioned the king to restore him to his authority as Viceroy of the Indies, but it was useless.

The hardships of his many voyages had broken his health, and he died at Valladolid on the 20th of May, 1506. His body was buried in the church of Santa Maria in Valladolid, and thence removed to Seville. In the year 1536 his remains were taken to Hispaniola, and placed in a magnificent tomb in the cathedral of San Domingo. Here they remained until Hispaniola was ceded to the French in 1795, when they were once more removed, this time to Cuba, and deposited in great state in the cathedral at Havana.

Columbus' fame will never be forgotten so long as the world endures, but it seems a sad pity that his name should not have been given to the great continent which he discovered.

As you probably know, it was an Italian naval astronomer, Amerigo Vespucci, from whom America was named. It was he who fitted out Columbus' third fleet. In 1499 he himself sailed for the New World with Ojeda, and explored the coast of Venezuela. The accident which caused two continents to be named after him may be traced to an account of Amerigo's travels published in 1507. In this book he is wrongly represented as having reached the mainland in 1497—that is, before either Columbus or Cabot.

CHAPTER IX

THE DISCOVERY OF THE PACIFIC

More Spanish Discoveries—Balboa sights the Pacific—The Wonderful Voyage of Magellan—Dying of Hunger in the Pacific—How he reached the Philippines, and how he met his Death.

THE most distinguished of Columbus' pupils was Vincent Yañez Pinzon, the same who had accompanied the Admiral on his first voyage. Coming of a rich and influential family, he had no difficulty in equipping an expedition to visit the New World. He sailed from Palos in December, 1499, and boldly took a course toward the southwest.

When in mid-Atlantic his ships were caught in a heavy gale, and when at last the sky cleared he was startled to find that the Pole Star was no longer visible, and that strange constellations hung over him. He had of course crossed the Equator, and was now some degrees south of the Line.

Pinzon's men were terrified, but their leader held to his course, and sighted land on the 20th of January, 1500. This land was a part of Brazil, so Pinzon has the credit not only of being the first European to cross the Equator in mid-Atlantic, but also that of discovering Brazil.

Steering northward along the Brazilian coast, Pinzon reached the mouth of the Amazon, which, from its enormous width and the vast body of water which freshens the sea for a hundred miles or more from land, he realized

to be a river greater than any yet discovered. On islands in the mouth of the Amazon he found a race of simple, kindly natives who treated him most hospitably.

Pinzon's return for their kindness was to seize treacherously a number of them and carry them off as prisoners.

From a point opposite the mouth of the Orinoco Pinzon sailed for Hispaniola. Here he was caught in a fresh storm. Two of his vessels were lost, and it was not until the end of September that he again reached Spain. He had brought home with him a quantity of dyewoods and several South American animals, including an opossum, the first of its kind to be seen in Europe.

From this date onward many small expeditions left Spain to explore various parts of the American coast. In 1508 Pinzon, in company with Juan Diaz de Solis, reached Cape St. Augustine on the Brazilian coast, and sailed south past the mouth of the Rio de la Plata as far as the fortieth degree of south latitude. In 1514 Solis started again, and traveling in a similar direction entered the mouth of the La Plata. Here he went ashore with a small party, but was caught by raiding Indians, who seized him and five of his men. His companions aboard the ship saw their commander killed, roasted, and eaten.

One result of these numerous expeditions was the establishment of a small colony on the Isthmus of Darien somewhat to the south of the present Panama Canal. This was in charge of Nunez de Balboa. Balboa was a typical Spaniard, a good leader, a fine fighter, but utterly merciless in his dealings with rivals or with natives. From his colony he made expeditions against the neighboring chiefs, and from one of these whom he had taken prisoner he learned that there was a great sea a few days' journey to the south.

Feeling certain that this was the ocean which Columbus

had so long sought for in vain, he boldly determined to march across the isthmus. It was in the year 1513 that Balboa started on this perilous journey with a mere handful of men. The country which he had to cross was thick forest and fever swamps, and it was impossible to travel more than a few miles daily. Once the little band was attacked by a large force of natives, but they beat them off and disgraced their victory by murdering their prisoners.

At last they reached a range of low hills. Nearing the top, Balboa halted his little force and went on alone. Aching with fatigue, he climbed the last of the rocky heights. It was midday, and a tropical sun blazing from a cloudless sky shone upon a vast ocean, stretching endlessly toward the west. So on the 25th of September, 1513, Balboa was the first European to set eyes on the Pacific Ocean.

He and his men marched down to the shore, and finding some native canoes embarked, made their way to a group of small islands. But the canoes were hopelessly unseaworthy, and it was only with great difficulty that the Spaniards managed to return to the shore. Here they were again attacked by natives, but succeeded in beating them off.

For some time Balboa and his men remained on the Pacific coast, and found that the natives were rich in pearls. The return journey was most difficult and dangerous, and it was only by severe fighting that the little band of adventurers won through. It was not until January, 1514, that they arrived again at Darien, from which place Balboa sent news of his great discovery.

But, like Columbus, Balboa had enemies in Spain. The king sent out a new governor named Pedrarais Davila, and his first act on reaching Darien was to call Balboa to account for his treatment of the natives. For three long years the history of the new colony was one series of quarrels

between Davila and Balboa. In the end Davila trumped up a charge of treason against Balboa, and the unfortunate man was publicly executed in 1517.

During the first ten years of the sixteenth century many hundreds of Spaniards settled in the West Indies. The original settlement in Hispaniola was under the government of Diego Columbus, son of the great Admiral. Other settlements were made in Cuba, Porto Rico, and elsewhere.

In the year 1512 Juan Ponce de Leon, ex-Governor of the colony of Porto Rico, fitted out three ships to go in search of the fountain of perpetual youth. This fountain, so the natives told him, was situated on an island somewhere to the northwest, and had the property of restoring all who bathed in it to youth and perfect health.

To us it seems curious that these hardy adventurers could have placed any faith in such a startling story. Yet, as a matter of fact, no tale was too tall to find believers even among the better-educated of those days.

After sailing some days to the northwest, Ponce de Leon sighted a low, sandy coast. It was on Easter morning that this new land was first seen. Now the Spanish name for Easter Day is Pascua Florida, and for this reason De Leon gave to his new discovery the name of Florida. He made various attempts to land, but his little force was not strong enough to cope with the hosts of Indians who defended their coast, and De Leon returned to Porto Rico.

He was given the post of governor of the new country, and returned in 1521 to conquer his new subjects. But again the Indians proved too much for him, most of his men were killed, and he himself returned to Cuba and died there from the wound of a poisoned arrow.

Although Balboa had seen and even set sail on the Pacific, the Spaniards were still as far as ever from finding their westward way to the Indies, and it is rather an in-

teresting point that this discovery was eventually made by a Portuguese and not a Spaniard.

Fernando Magalhaens, or, as he is usually called, Magellan, was a Portuguese gentleman of good family. He had been a member of the Portuguese expedition sent to Malacca and Ceylon in 1508, but although he did much good service for Portugal in the East he got no reward.

Feeling himself badly treated, in the year 1517 he went off to the Court of Spain, where Charles V gave him a cordial reception. To the king, Magellan suggested that the strait leading to the Indian Seas would probably be found to the south of the American continent, and he thought that if he could find it he might be able to make his way to the Moluccas or Spice Islands, to which at that time Spain believed that she had a better claim than Portugal.

Magellan engaged himself to take a fleet to the Moluccas by the west, and five vessels were fitted out with crews amounting to two hundred and thirty men. This fleet sailed on the 20th of September, 1519, and arrived quite safely on the coast of Brazil opposite the mouth of the Rio de Janeiro. Sailing to the south, Magellan reached the La Plata River in January.

Magellan seems to have had some idea that this river was the strait which he was seeking, but, finding it to be a fresh-water river, he again coasted southward. Toward the end of March, 1520, he arrived at Port St. Julian in Patagonia. Here the expedition met very cold weather. It was of course the beginning of the Antarctic winter, so Magellan decided to remain there during the colder months. His men, however, had different ideas. Shivering in the bitter cold and afraid of starvation, they demanded to be allowed to return to Spain. Magellan flatly refused to listen to them.

THE DEPARTURE OF JOHN AND SEBASTIAN CABOT FROM BRISTOL

From the picture by Ernest Board, R. W. A., in the Bristol Museum and Art Gallery

By permission of the Artist

"JOHN CABOT ENCOUNTERED ENORMOUS ICEBERGS"
Paul Hardy

The mutineers, led by Luis de Mendoza and Gaspar Quesada, demanded a conference. To this Magellan agreed, and ordered the mutineers to meet him on his own ship. The mutineers refused, and Magellan made up his mind that Mendoza must die. Picking some of his best men, he sent them to Mendoza's vessel with peremptory orders that Mendoza should accompany them to the Admiral's ship. Mendoza refused, and at once one of Magellan's men sprang at him and killed him with a dagger. Quesada was then arrested and executed. A third leader was marooned ashore, and the back of the rebellion was broken.

During the long, cold winter months natives occasionally visited the ships, and we are told that some of these were of gigantic stature. One was so tall, says Pigafetta, that our heads scarcely came up to his waist, and his voice was like that of a bull. They christened this man Juan Gigante, in other words, "Giant Johnny." It was here too that they first saw what they called a llama—an animal which they described as having the head and ears of a mule, the body of a camel, the legs of a stag, and the tail of a horse. This, however, was not a llama, but a guanaco.

In October the weather became warmer, and Magellan sailed on toward the south. In a few days they reached the deep, narrow, and winding strait which to this day bears the name of its discoverer. Finding that the water was deep and salt and that a strong current ran in a westerly direction, Magellan felt certain that he had at last discovered the passage which had so long been sought in vain. One of Magellan's ships, the *Santiago,* had been wrecked. Now a second, the *San Antonio,* deserted him and sneaked back to Spain; so it was with three ships only that Magellan reached the Pacific Ocean on the 28th of November, 1520.

From this spot he bore boldly away in a westerly direction, and after voyaging for three months and twenty days arrived at the Philippine Islands. This was on the 16th of March, 1521.

The hardships of this voyage had been terrible. The men's food had gone rotten, the fresh water had become putrid. You must remember that in those days sailors lived on biscuit and salt beef. They had no tinned provisions, no vegetables, no lime juice. A number of the men died of scurvy, and of those left alive few were fit to work the ships. It was very fortunate for the survivors that the Pacific lived up to its peaceful reputation, for otherwise Magellan's expedition would never have survived that terrible voyage. As it was, the crews had been forced to boil down skins and pieces of leather in order to keep themselves alive.

The Philippine Island which they first sighted was called Zebu, and is one of the smaller of the group. Here Magellan went ashore, accompanied by a native of Malacca, who acted as interpreter. The King of Zebu proved most friendly. Fruit and other provisions were given to the starving sailors, and the king not only acknowledged himself as a vassal of the King of Spain, but allowed himself to be baptized as a Christian.

For a time all went well, but the chief of a neighboring island refused to have anything to do with the Spaniards, and declared war upon the King of Zebu. Magellan offered to defend the King of Zebu from his enemies, and set out at the head of his men to attack them. The result was tragedy. Surrounded by an enormous host of enemies, the Spaniards were overwhelmed. Soon their ammunition was exhausted. They gathered round their leader and kept the natives off with cold steel. The latter drew away, and bombarded them with lances and stones. A

great stone struck Magellan on the head and stunned him, a second broke his thigh, and as he fell two lances were driven through his body.

Nor was this the end of the tragedy. The King of Zebu, seeing that Magellan was dead, seized the survivors and treacherously murdered them. The few who remained alive hauled up their anchors and set sail as rapidly as possible. They reached Borneo, where one of their ships, the *Conception,* which had become quite unseaworthy, was burnt. With the two remaining ships they arrived at the Moluccas. Here the *Trinidad,* which was leaking badly, was beached for repairs. When refitted, she attempted to return across the Pacific, but her seams again opened, and she was driven back to the Moluccas, where she arrived in a sinking condition. Her crew was made prisoners by the jealous Portuguese.

The one surviving ship of Magellan's fleet, the *Vittoria,* under the command of Sebastian del Carno, returned by the Cape of Good Hope, and on the 6th of September, 1522, arrived safely at San Lucar, the port from which she had started three years and fourteen days earlier.

And so was achieved the first voyage round the world.

CHAPTER X

THE ENGLISH TAKE A HAND

England's Early Efforts—John Cabot discovers North America—Attempts at the Northwest and Northeast Passages—How Trade with Russia was first established.

IT seems a little curious that England had so small a part in the first discovery of the New World. It must, however, be remembered that during the first years of Spanish exploration England was under the rule of Henry VII, and that this king, although in many ways a good ruler and a fine fighter, was avaricious and also much occupied with domestic affairs.

At any rate, he does not seem to have had any money to spare for explorers.

We have good proof of this in the letters patent which he granted to John Cabot. John Cabot was a native of Genoa, who about the year 1490 settled in Bristol with his three sons, Lewis, Sebastian, and Sancto.

Cabot, it would seem, had a sort of idea that there might be a passage into the Indian Seas round the north of the newly discovered American continent. It was for this reason that he applied to the king for letters patent for a voyage of discovery.

These letters patent gave an undertaking that no other English subject should visit the discoveries of John Cabot and his sons without license from them, and gave them the

right to occupy any such lands as "our vassals and lieutenants." On the other hand, it was stipulated that the aforesaid John and his sons should return to the port of Bristol and no other, and that they should pay one fifth of the net profit of their voyages to his Majesty, King Henry.

AN OLD MAP OF THE NEW WORLD SHOWING THE SUPPOSED PASSAGE INTO THE INDIAN SEAS

Needless to say, the king left it to Cabot to provide the ships, so whatever happened his Majesty was not out of pocket.

We know very little about this first voyage of John Cabot. One account says that there was only one small ship, the *Matthew,* manned by eighteen men of Bristol. Another says that there were two ships manned by three hundred men. This much we do know, that John Cabot sailed toward the northwest at the beginning of the summer

of 1497. The expedition reached the coast of North America, and sailed along the coast in a northerly direction as far as the fifty-sixth degree of north latitude—that is, along the coast of Northern Labrador. Finding that land still continued, and despairing of discovering a passage, Cabot turned south again, and coasted as far as Florida. Since his provisions were failing he then returned to England.

He brought with him three natives of Newfoundland, "savages clothed in beaste's skins and did eat raw flesh and spake such speech that no man could understand them; and in their demeanour were like to brute beasts, whom the king kept a time after."

Cabot reported that these Northern lands yielded little fruit, but were full of white bears and "stagges far greater than ours." He said also that the sea was full of fish, quantities of salmon and cod, and soles which he says were above a yard in length.

One thing is quite clear, that Cabot reached the mainland of America about a year before Columbus did so, for, as you will remember, it was not until his third voyage that Columbus first set foot on the continent of South America.

Cabot had an Italian friend in London named Soncino, who was a servant of the Duke of Milan. There is still in existence a letter written by Soncino to the Duke, giving some interesting particulars of Cabot's voyage.

The most interesting part of this letter relates to the abundance of fish found in the seas off Newfoundland. Soncino says that in future England will have no need of the Iceland stock-fish trade.

In 1498 John Cabot, either with or without his son Sebastian, made a second voyage, this time going so far north that even in the month of July he encountered enor-

mous icebergs. He came home safely, and was pensioned by the king. So far as we know, he died about the year 1500.

At the beginning of the sixteenth century England was in a somewhat unenviable position so far as the world's trade was concerned. The Portuguese had already found a way to the East round the Cape of Good Hope, and the Spaniards under Magellan had discovered the route by Cape Horn. For England, therefore, there seemed nothing left except to sail to the East by the Arctic, making the passage either round the north of America or in an easterly direction round the continents of Europe and Asia. You must remember that in those days no one had the least idea of the masses of ice which blocked these northern seas, and which made navigation almost impossible.

We know little of these earlier attempts to find the Northwest Passage. The Bristol merchants, however, seem to have been keen upon Northern exploration, for one of them, Mr. Robert Thorne, a wealthy trader who had lived in Spain, begged King Henry VIII to "set for a discoverie even to the North Pole." The king appears to have taken his advice, for he sent "two fair ships well manned and victualled, having in them divers cunning men to seek strange regions." These ships left the Thames in May, 1527, but all we know of their voyage is that one vessel was wrecked on the coast of Newfoundland.

Nine years later Master Hore of London, "a man of goodly stature and of great courage", manned a ship, apparently to discover the Northwest Passage. Of six-score people who formed his crew no fewer than thirty were gentlemen of the Inns of Court.

The ship reached Newfoundland, and was wrecked there, and Hore's crew nearly starved to death on the barren coast. It is even said that the wretched men were driven

to eat one another. The survivors were rescued by a French ship.

Sebastian Cabot, who in the meantime had been in the service of the King of Spain, and had made voyages to the coast of Brazil, returned to England and became Grand

CARRACK ABOUT THE TIME OF CABOT

Pilot of England under Edward VI. He became also "governour of the mysterie and companie of the marchants adventurers for the discoverie of regions, dominions, islands and places unknowen."

It was in the year 1553 that an expedition was fitted out by the advice of Sebastian Cabot for the discovery of a northeast passage to Cathay. Three ships were made ready, and it is interesting to note that the hulls of these vessels were sheathed with lead in order to defend them from the teredo, or shipworm. This is the first account we have of English ships being so treated. The practice, however, had been common in Spain for some time past.

Sir Hugh Willoughby was captain-general of the little fleet, and second in command was Richard Chancellor, whose ship was the *Edward Bonaventure*.

In spite of the care with which these ships were fitted, the expedition had a tragic ending. On the 18th of September two of the vessels entered the mouth of a small river on the east coast of Lapland, and since winter was closing in resolved to encamp there. Chancellor's ship had already been separated from the other two in a storm.

Provisions ran short. From the diary of Sir Hugh Willoughby we know that he sent out men in various directions to try to find food. But these all returned without discovering any sign of natives or food of any description.

In the following spring the two ships were discovered by some Russian fishermen, but every soul in them, including Sir Hugh himself, was dead. This was the first of the great tragedies of English Polar exploration.

Richard Chancellor was more fortunate than his companions. He sailed farther to the north. As he expresses it, "I sailed so far towards that unknown part of the world, that I came at last to a place where I found no night at all, but a continual light and brightness of the sun shining clearly upon the huge and mighty sea."

At last he entered a great bay, where he found plenty of people who told him that the country in which they had arrived was Russia or Muscovy, and was governed by a king named John Balisovitch. This bay was what we now call the White Sea.

Chancellor made up his mind to get into touch with this unknown monarch, and actually traveled fifteen hundred miles overland to Moscow. Here he and his men found the Russian Court living in a splendor which quite startled them. They were brought before the king, who

called them to his table and gave to each of them a cup of wine.

George Killingworthe, one of Chancellor's officers, was the proud possessor of a splendid beard. The prince took the beard in his hand, and called the attention of the Archbishop to it, who blessed it in Russian, saying, "This is God's gift." Indeed, it seems to have been a very wonderful beard, for it was no less than five feet two inches in length, thick, broad, and yellow in color.

In the next spring Chancellor returned from Archangel to England, bringing with him a letter from the Tsar to Edward VI. So it is Chancellor whom we have to thank for opening up trade with Russia, a trade which was of great value to both countries, until the Great War and the horrors of the Russian Revolution destroyed it.

Chancellor's voyage made a great stir in England, and fresh ships were quickly got ready. But before this second expedition could sail, Stephen Burrow, who had been with Chancellor during his first voyage, set off on his own account in April, 1556, in one small vessel to explore the northern seas. On the last day of July he reached the island of Waigatz. A huge mass of land was in sight, and this he learned from the Russians was called Nova Zembla, or the New Land, and was inhabited by people called Samoyeds.

The English landed on Nova Zembla, and found that the people lived in tents made of deerskin, and worshipped roughly carved wooden idols. Some of these, they noticed, were smeared with blood. Strong easterly winds prevented Burrow from going farther in that direction, and turning homeward he safely returned to England.

While Burrow was away Chancellor had sailed on his second voyage, and as before reached Moscow in safety. In the autumn of 1556 he started homeward, bringing with

him an ambassador from Russia named Osep Neped. In the North Sea his fleet of four ships was caught in a heavy gale, and three of them were wrecked. Chancellor's own ship went upon the rocks in Pitsligo Bay on the Scottish coast. Chancellor himself was drowned, but happily the ambassador was saved. He was taken to London and treated with much kindness, with the result that a trade treaty was made between England and Russia.

CHAPTER XI

CORTES IN MEXICO

The Great Adventure of Hernando Cortes—His Battles against Tremendous Odds and his Conquest of the Great Empire of Mexico.

WHILE the English were busy in the Far North the Spaniards were extending their conquests in warmer regions. As we have seen, their first settlements were in the West Indian Islands and near the Isthmus of Panama.

All these early Spanish explorers had heard tales of the country of gold lying to the northwest, and it could be only a question of time before some attempt was made to discover its riches.

In the year 1485 there was born at Medelin in the Spanish province of Estremadura a boy called Hernando Cortes. His family was noble, but not rich. Young Hernando was brought up to be a lawyer, but before he was twenty he had thrown over all idea of wig and gown and turned soldier.

In 1504 he left for the new colony of Hispaniola, of which the Governor, Orvando, was his cousin. He went with Velasquez in his expedition to Cuba and helped to subdue that island. From that date onward we do not hear much of him until the year 1518, when Velasquez gave him command of an expedition fitted out for the conquest of New Spain—that is to say, the part of the mainland which had recently been discovered by Grijalva.

It was not much of a force, for it consisted of ten small ships, carrying about six hundred and fifty men, eighteen horses, and a few of the rude cannon of that time.

The expedition had hardly started before Velasquez who seems to have been a weak, suspicious sort of man, made up his mind to recall it. But Cortes, now that he had his chance, had no idea of giving it up. Like Nelson, he turned a blind eye to the signals of recall, and in the month of March, 1519, he and his little force landed on the coast of Mexico.

And now began a journey of discovery and conquest which is really one of the most wonderful romances in the history of the world. The army with which Cortes started to conquer a vast and highly civilized empire consisted of five hundred and fifty Spaniards, a couple of hundred Indians, fifteen horses, ten little brass guns, and some smaller pieces called falconets. But Cortes knew that, having disobeyed the orders of his superior, his one chance was in success. It was literally a case of do or die.

The harbor in which he had landed was in Yucatan, that strange peninsula full of weird relics of a forgotten civilization which lies on the south side of the Gulf of Mexico. Marching inland, Cortes reached Tabasco, where he met a large force which the King Montezuma had sent to oppose him. Small as his army was, the Indians had no chance against the Spaniards. Panic-stricken by the roar of artillery and by the appearance of horses, animals which they had never seen before, the Mexicans broke and fled.

Cortes then marched rapidly forward, and at San Juan de Ulloa ambassadors from Montezuma met him, bringing rich presents, consisting of gold ornaments, cotton stuffs, and wonderful pictures formed of colored feathers. Here he learned that the realms of Montezuma stretched from sea to sea, and included the territories of thirty powerful

chiefs; also that the Mexicans could put into the field an army of two hundred thousand men.

Some of Cortes' followers were badly frightened, and declared it was madness to struggle against such terrible odds. Cortes, however, was as cunning as he was brave. He told his men that his object was to establish a colony, and returning to Vera Cruz on the coast began to build a town. He then burned all his ships, so that, however frightened his followers became, they could not sail away. Meantime he made friends with the people of Tlascala. The Tlascalans were republicans who hated Montezuma. They were brave fighters, and proved most valuable allies to the Spaniards.

When all was ready Cortes started again on a two-hundred-and-sixty-mile march to Montezuma's capital. Montezuma himself was afraid openly to oppose the Spaniards, so sent ambassadors to meet them at a place called Cholula, secretly making arrangements to surround and kill them all. It was his allies the Tlascalans who warned Cortes of this treachery, and Cortes decided to read the Mexicans a terrible lesson. He utterly destroyed the town of Cholula and killed nearly all the people. Then he marched straight on the City of Mexico.

The sight of this wonderful capital must have amazed the Spaniards. They saw before them a wide plain in which was a great lake, and on an island in this lake a vast city, which at that time held at least three hundred thousand inhabitants. The city was approached by three giant causeways of solid masonry with wooden drawbridges at the ends. The whole appearance, says the historian Bernal Diaz, was like that of an enchanted castle in a dream.

Montezuma received his visitors with every appearance of friendship. As for his people, they thought that the

Spaniards were children of the sun and worshipped them. A palace was given to Cortes in which to live, and his first care was to fortify it thoroughly.

Cortes did not trust Montezuma, and he had just had news of a disaster which might have very serious consequences. A Mexican general had attacked the small garrison left at Vera Cruz, had killed some Spaniards, and taken one prisoner. This unlucky man had been murdered, and his head sent round to all the chief cities of the empire so as to convince the superstitious natives that the invaders were not immortal.

Well aware that if the spell was once broken the whole country would rise against him, Cortes made up his mind to a bold stroke. With a few of his officers he went to the palace of Montezuma and seized Montezuma himself. Once master of the monarch, he found himself in possession of the reins of government.

Now comes the blackest part of Cortes' story. The wretched Mexican general who had attacked Vera Cruz was by his order brought to the capital and with several of his officers burned alive. The unfortunate Emperor himself was loaded with chains and forced to acknowledge himself vassal of the Emperor Charles V. He was also compelled to pay an enormous ransom in gold and jewels.

Fresh trouble was brewing. Cortes heard that Velasquez, furious at Cortes' disobedience, had sent a strong expedition under De Narvaez to put a stop to his career of conquest. But again Cortes was equal to the occasion. Leaving two hundred of his men in the City of Mexico, with the rest he swooped down on Narvaez, whose force consisted of eight hundred men. He surprised him in a night attack, defeated him utterly, and took him prisoner. Narvaez's troops gladly consented to join Cortes.

Thus reinforced, Cortes returned to the City of Mexico.

But no sooner had he returned than fresh trouble broke out. The Mexicans were enraged at the destruction of their idols, and led by their priests rose against the conquerors. At this critical time the unhappy Montezuma died.

Matters became so serious that Cortes was forced to retreat. He began his march in the dead of night, but thousands of the enemy surrounded his little force, and he lost all his guns and horses. The Spaniards were forced to march through tangled forest and deep swamps, harassed by parties who hung close behind them and shot arrows at them. The Indians constantly shouted at them, "Go on, robbers, till you arrive at the place where punishment awaits you."

The Spaniards did not understand the threat until they reached the heights above Otumba, where they saw the plain black with a vast army waiting to receive them. To any one but Cortes this would have been the end of all things, but the Spanish leader always appeared at the greatest advantage when things seemed at their worst. Without giving his men time to think, he ordered them to charge. He himself, with a few chosen men, rushed into the center of the Indians and seized their sacred banner. In less than an hour the whole of the vast host of Mexicans was scattered and broken. This amazing battle was fought on the 7th of July, 1520.

Now Cortes made up his mind to subdue the whole Mexican Empire, and with this object sent away trusted men to secure recruits and ammunition. Six months after his disastrous retreat he marched back on the City of Mexico with an army of five hundred Spaniards, nine guns, and a strong body of Tlascalans.

The new Emperor Guatamozin defended his city with great courage, and for many weeks defied the invaders.

THE SPANIARDS ENTERING TLASCALA
Thomas Maybank

THE RETREAT OF CORTES
Thomas Maybank

Cortes at last set to work to build some small ships, and once these were finished made himself master of the lake. After that it was only a question of days before the capital fell. This happened on the 13th of August, 1524, and now at last the Spaniards were masters of Mexico. Such success was bound to meet with its reward, and Cortes was made a marquis of Spain and Governor and Captain-General of Mexico.

To do Cortes justice he proved himself an excellent governor. In May, 1528, he returned to Spain, and was received with honor by the king. Two years later he was back in Mexico, and for ten years was busy making new discoveries to the north of the country. Cortes was in fact not only a great fighting man, but a great discoverer. In 1540 he sailed to Spain for the last time. As was so often the case in those days, his great services were forgotten. His last years were spent in poverty and neglect, and he died near Seville in December, 1547.

CHAPTER XII

PIZARRO IN PERU

The Conquest of Peru, and the First Discovery of the Andes by the Spaniards—The Amazing Voyage of Orellana down the Amazon.

IT is curious that the birthplace of Francisco Pizarro was in Estremadura, the same province from which arose Hernando Cortes. But while Cortes was the son of a noble family, Pizarro's birth was obscure, and the boy received no education. We do not even know the exact date of Pizarro's birth, but he was probably from five to ten years older than Cortes. Of his early history we know nothing except that when he was quite young he joined the army and served in Italy.

In the year 1509 Pizarro was at Darien, and a little later he served under Balboa when he made his famous journey across the isthmus and first sighted the Pacific. In the year 1522 we find Pizarro, in company with Almagro and a wealthy priest named Luque, planning to make an expedition against the Empire of Peru.

At that date very little was known of Peru, but rumors had reached Panama of the immense wealth of the Incas. One small vessel, carrying only a hundred and twelve men, was all that the three could muster for their expedition. Not knowing anything of the seas which they were about to cross, the leaders chose the wrong time of the year, and were delayed by constant southeasterly winds. The first

attempt was a failure, and it was not until 1526 that a new expedition, this time of two ships only, could be got ready.

All sorts of misfortunes occurred—the weather was bad and the men suffered from fevers and other complaints. At last Pizarro landed with part of his forces on an island called Gallo, which is just off the coast of what is now the United States of Colombia, while Almagro went back to Panama to collect fresh recruits. The climate was horrible. Stories of the sufferings of Pizarro's men reached Panama, and instead of reinforcements a vessel arrived to take his men back.

Now we get a glimpse of Pizarro's real character. With his sword he drew a line upon the sand, and told those who wished to leave him and give up their hopes of conquest or gold to cross it. Nearly all did cross it, and Pizarro was left with but twelve followers. He and these gallant twelve suffered horribly from want and exposure, and were almost at their last gasp when at last Almagro returned with recruits.

They sailed at once, and after a voyage of twenty days reached the coast of Peru. They touched at several places on the coast, and what they saw convinced them that the riches of the Inca Empire were greater even than they had supposed. But they had not men enough to make a settlement, and in 1527 they returned to Panama.

Three years had been spent, and so had all the money belonging to the three partners. But, like Cortes, Pizarro was the sort who would never give up. He went straight back to Spain, saw the king, and dazzled him with his tales of golden Peru. He was appointed governor of all the country which he should conquer, but very little money was given him.

Then a stroke of luck befell him. He met Cortes himself, and found the conqueror of Mexico ready and willing

to assist him. Cortes gave him a handsome sum of money, and with this he returned to Panama. Yet even with the royal warrant in his pocket Pizarro found much difficulty in collecting a force sufficient to give him any chance of success.

In the end his army consisted of one hundred and eighty soldiers and three small vessels. With this force Pizarro set sail in February, 1531, leaving his partner Almagro behind to collect reinforcements. Thirteen days later he landed in the bay of St. Matthew, and marched southward. The little party reached the province of Caque, surprised a small town, and there found such a treasure of gold and silver as put beyond all doubt the wealth of the Incas.

Pizarro at once sent a quantity of this treasure back to Panama, with the natural result that a shipload of fresh recruits soon arrived. With his force thus strengthened, Pizarro marched straight into the heart of the Peruvian Empire. Before him he sent an embassy pretending friendship with the Inca Atahualpa. The Inca himself headed a splendid procession to meet his visitors. He was carried on a throne covered with the feathers of rare birds and crusted with gold and silver. An army of thirty thousand men followed him.

Pizarro was not at all dismayed. He knew that these Peruvian Indians were poor fighting men, and he had already made up his mind to follow the example of Cortes and seize the Emperor's person. It has been said that at this time the Inca Empire was split up by quarrels in the reigning house. But there is no need for such excuses. The fact of the matter is that the Spaniards were so superior in fighting power to the Indians that Pizarro's little force of less than two hundred men had no trouble in marching straight through the Inca Empire.

Pizarro lost no time in acting upon his plans. With a

few picked men he rushed forward and seized the Inca. The Indians showed fight, but the Spaniards defeated them and killed four thousand without the loss of a single man on their own side.

Atahualpa offered to ransom himself. The room in which he was confined was twenty feet long and sixteen wide. He promised to fill this with gold as high as he could reach with his hand in exchange for his liberty, and this offer Pizarro accepted. This gigantic ransom amounted to three and a half million pounds of our money, and Pizarro's men received about seven thousand pounds apiece.

Francisco Pizarro was a brave and determined man whose followers were devoted to him. In many ways he was greatly superior to the adventurers of his time, yet nothing can excuse the treachery of what followed. He trumped up charges against the Inca, who was condemned to be burned alive, but in the end the unfortunate emperor was not burned, but strangled. Pizarro lost no time in completing his conquest, and in January, 1535, he founded the city of Lima as capital of the new province. The Court of Spain made him marquis and gave him a vast grant of land.

Meantime Pizarro's partner Almagro was trying to conquer Chile. But Chile was a much more difficult country than Peru, and Almagro's men, climbing the heights of the Andes, suffered terrible hardships. Many were frozen to death. The natives, too, were hardy fighters, and picked off many of the Spaniards with their arrows.

While Almagro was struggling with these difficulties news came to him that the Peruvians had rebelled and were besieging Cuzco, the old Inca capital. He hurried back to find that the Peruvians had captured half the city, while the surviving Spaniards under Ferdinand and Gonzalo

Pizarro, brothers of Francisco, were still defending the other half. His arrival changed the whole face of affairs. He drove off the Peruvians and took the city.

There had long been bad blood between Almagro and his former partners. Almagro now took the two Pizarros prisoners, but they escaped. Francisco Pizarro arrived with a strong force, Almagro was defeated, taken prisoner, and the poor old soldier was beheaded.

This was the end of the conquest of Peru, but only the beginning of the great geographical discoveries which followed.

In the year 1537 Vadillo marched with a small force from Uraba near Panama down to the very south of Peru. It was an amazing journey, for the whole of it was made through trackless forests, over snowy mountains, and through country thickly inhabited by savage Indians. About the same time one of Cortes' officers, Alvarado, marched with an army of five hundred men toward Quito. Quito is the capital of Ecuador and lies just south of the Equator, at the foot of the great volcano of Pichincha, at a height of over nine thousand feet above the sea.

Alvarado's men met heavy weather. They had to struggle through deep snow and torrents of icy rain. On one occasion they were nearly overwhelmed by a shower of ashes thrown out from the great volcano. Yet in the end they reached Quito, where they were bought off with gold enough to make them all rich for life.

And now we come to a journey which is without doubt the most wonderful of that time. From the Indians the conquerors of Peru learned of a country to the east which was said to be rich in spices, and Gonzalo Pizarro, a brother of the conqueror, decided to visit it.

In the year 1540 he gathered an army of three hundred and fifty Spaniards and four thousand Indians and set

out. Soon after starting a tremendous earthquake shook the mountains, and was followed by such frightful storms of thunder, lightning, and rain that the valleys were filled with flood water and the Spaniards forced up into the hills. Here they nearly starved, but there was no going back. Hungry and frostbitten, they struggled across the lofty ridge of the Andes, and were grateful indeed when they reached the province of Zumaco, where the cinnamon trees grew in plenty.

From Zumaco Gonzalo marched eastward, following the course of a river. The country became desperately difficult, for it was cut up in every direction by marshes and quagmires. Food ran out, and the wretched men had to live on wild fruits and berries.

Gonzalo made up his mind to build a boat to carry the sick and the baggage. Every one from the highest to the lowest was obliged to help. The worn-out shirts of the Spaniards were used instead of tow to caulk the seams, and gum was scraped from the forest trees to serve instead of pitch.

So they went on for some six hundred miles, but the supplies of wild fruit and roots became so scarce that the whole force was in danger of starving. So Gonzalo ordered Francisco de Orellana, one of his officers, to take the boat and fifty men and hurry down the river in search of provisions.

Orellana went forward, and presently found that the river on which he was traveling entered another and even greater stream. But he had seen no people or food; nothing was visible but vast and impenetrable forest. Finding that his exhausted crew were quite unable to row back against the strong stream, he decided that their only chance for life was to go on. On the 31st of December, 1540, the fifty Spaniards, having eaten the leather of some saddles

boiled with wild herbs, embarked on the great river, allowing its current to carry them into the unknown.

This river was the Maragnon, a tributary of the great Amazon, and after a time Orellana and his men found themselves floating down the bosom of that mighty stream. Unfortunately we know little of the details of that amazing voyage, but this we do know, that Orellana and a few survivors did succeed in reaching the mouth of the Amazon, having crossed the whole width of the South American continent. More than that, he succeeded in sailing across the open sea to the nearest Spanish colony, where he bought a vessel and returned to Spain.

As for the unfortunate Gonzalo Pizarro, when he found himself deserted, there was nothing for it but to return. That march of twelve hundred miles without food or supplies of any kind must have been a fearful ordeal. He and his men were forced to eat their horses, their dogs, even poisonous snakes. But at last he won through, though of his original force of nearly four thousand five hundred only eighty were left alive.

DEATH OF THE INCA
Thomas Maybank

THE MARCH OF ALVARADO
Thomas Maybank

CHAPTER XIII

FROBISHER AND SIR HUMPHREY GILBERT

The Story of Martin Frobisher—Fresh Attempts by the English to Discover a Northwest Passage—The Beginning of the Great Elizabethan Era.

IN the year 1574 the celebrated Sir Humphrey Gilbert wrote a tract called "A Discourse to prove a Passage by the North-west to Cathaia and the East Indies." This was printed at a time when the difficulties of the Northeast Passage had become well known. On the other hand, the great width of the North American continent was still quite unknown. It was believed that the continent tapered to the north, just as it had been proved to do at the south, and that a northwest passage existed round the north coast of Labrador. If such a passage could be found, it would shorten the voyage to China by at least half, and English merchants who were jealous of the Portuguese and Spanish discoveries were naturally anxious to find it.

Martin Frobisher, a Yorkshireman born about the year 1535, and who lived in London, was specially keen on this discovery, but for years was unable to raise money to outfit an expedition. It was the Earl of Warwick who lent his powerful help, but even so Frobisher could only afford three little ships, the *Gabriel* and *Michael,* which are said to have been each of only thirty tons burden, and a tiny pinnace of ten tons. In all he had but thirty-five men. It

was in June, 1576, that the expedition left the Thames, and it is on record that, as the ships passed Greenwich, Queen Elizabeth stood at a window of the palace and waved farewell to them.

The pinnace was lost in a storm, the *Michael* and her crew deserted, but Frobisher in his little *Gabriel* saw land on the 11th of July. This was the southern point of Greenland. Thick fog hung over the sea, and owing to masses of ice it was impossible to reach the land. They sailed onward, and a fortnight later again sighted land, which they took to be Labrador. Here again they were threatened by ice, and on the 1st of August they were passing a huge berg when it broke in two, with "a noise as if a great cliff had fallen into the sea."

SHIP ABOUT THE PERIOD OF FROBISHER

Sailing northward Frobisher found a wide channel with land on either side, and this strait he made up his mind was the passage for which he had been looking. What he had actually discovered was the strait that opens into the great land-locked gulf still known as Frobisher's Bay.

Up the straits he sailed for a hundred and fifty miles, then seeing smoke he landed. The smoke came from an Eskimo village, and the Eskimos, seeing the strangers, hid behind rocks and tried to ambush them. Luckily for himself and his men Frobisher saw what they were after, and got back to his boat. Presently, however, he managed to make friends with these people, who brought him salmon, seals, and skins, and were given in return bells, looking-glasses, and other toys.

Since his ship was in bad condition, Frobisher made up his mind to return. With him he brought one of the Eskimos, besides flowers, grasses, and some minerals which looked like black stone. After his return to London one of these pieces of black stone was by chance found to contain gold, and it was this chance which caused the queen to interest herself and help to outfit a fresh expedition.

This time Frobisher's flagship, named the *Aid,* was a tall ship of two hundred tons burden. With her were two small barques, again named the *Gabriel* and *Michael,* each of about thirty tons. The expedition sailed on Whitsunday, the 26th of May, 1577. On the following 4th of July Frobisher passed Cape Farewell, the southernmost point of Greenland, and made for his strait, but his vessels were unable to enter it, for it was blocked with ice; so taking his gold assayers with him, he set out to search for the black ore. For a long time they could find none. What they did find were Eskimos, and some of these were treacherous. Frobisher himself was shot in the back with an arrow, but luckily was not badly hurt.

Fresh storms threatened the ships, and the *Aid* caught fire. While her crew were putting out the blaze the ship herself was nearly rammed by a great iceberg. At last the ice cleared from the sound, and they sailed into it. On a small island, afterward called Smith's Island, because it was the first on which a forge was erected, silver ore was discovered, but it was not rich, and, as the old record says, "was won only with great labour."

A little later, however, gold ore was found, and a quantity collected and stowed aboard. On the 28th of July ice came driving into the sound and nearly wrecked the ships.

Various expeditions were made on land, and more Eskimos seen. The Eskimo huts are described in curious old-

fashioned language. "From the ground upward they build with whale's bones for lack of timber, which bending one over another, are handsomely compacted in the top together, and are covered over with sealskins, which, instead of tiles, fence them from the rain. In which house they have only one room, having the one half of the floor raised with broad stones a foot higher than the other, whereon strowing moss they make their nests to sleep in. They defile these dens most filthily with their beastly feeding, and dwell so long in a place (as we think) until their sluttishness loathing them, they are forced to seek a sweeter air, and a new seat, and are (no doubt) a dispersed and wandering nation, as the Tartarians, and live in hordes and troops, without any certain abode, as may appear by sundry circumstances of our experience."

It was on the 23rd of August that the expedition started back for England, carrying with it some two hundred tons of the black ore. It was time, too, for the next morning the snow was nearly a foot deep on the hatches. Crossing the Atlantic the ships were scattered by violent storms, but all three safely reached England. There the ore was assayed, but was found to contain very little gold. In spite of this disappointment, Frobisher was well received by the queen, who presented him with a chain of gold, and promised her help in fitting out a third expedition.

This time Frobisher found himself in command of a fleet of fifteen ships. It had been resolved to make a settlement in Meta Incognita, as the newly discovered country was called, and for this purpose wooden houses were packed in one of the ships.

But now fortune frowned upon poor Frobisher. Fearful gales dispersed the fleet, drift ice choked the strait, and the ship containing the huts was nipped in the ice and sunk with all its cargo. After enduring terrible hardships,

Frobisher found that there was nothing for it but to return. His disappointment must have been terrible, and for some time afterward we hear little of him. But seven years later he served under Sir Francis Drake in the West Indies, and in the year 1588 commanded one of the ships which helped to defeat the Spanish Armada. For this he was rewarded with a knighthood.

As we have already seen, it was from Sir Humphrey Gilbert that Frobisher received much encouragement in his first attempt to find the Northwest Passage. Sir Humphrey, unlike the Spaniards who had ventured merely for love of gold, engaged himself in the career of discovery from pure love of adventure. In spite of Frobisher's failure, Sir Humphrey still believed in the possibility of a northwest passage, and in the year 1578 he obtained a patent from the queen authorizing him to undertake discoveries in the West, and to take possession of any lands still unsettled by Christian princes or their subjects.

In the year 1583 Sir Humphrey set sail with five ships, the largest of which was two hundred tons burden, but the smallest only ten. This little fleet started from Cawsand Bay, near Plymouth. Aboard it were two hundred and sixty men, including shipwrights, masons, smiths, carpenters, and mineral refiners. Sir Humphrey took with him "for the amusement of the crew and allurement of the savages music in good variety, not omitting the least toyes as Morrice dancers, Hobby Horses and Maylike conceits to delight the savage people, whom they intended to win by all fair means possible."

The fleet reached Newfoundland on the 30th of July, and it is recorded that many Portuguese and French vessels were even at that early date engaged in fishing on the Banks. As many as a hundred vessels were seen.

Entering the harbor of St. John's, Newfoundland, pos-

session was taken in the queen's name, the land was surveyed and parcelled out, and a colony established. Sir Humphrey found the southern part of Newfoundland deserted, but in the north were savages, who, he says, were "altogether harmless." He speaks of the incredible quantity of trout, salmon, and cod, of the abundance of whales, and of "sundry other fish, very delicate, namely the bonitos, lobsters, turbot, with others infinite, not sought after." He describes the trees, "firs, pine and cypress, cherry trees, also pear trees but fruitless." He speaks of "beasts of sundry kinds, red deer, buffaloes, bears, ounces or leopards, wolves and foxes." Some of the foxes, he says, are black, "whose fur is esteemed in some countries of Europe very rich." There were also otters, beavers, and martens.

Having established his colony, Sir Humphrey with three ships started on a voyage of discovery to the southward, he himself sailing in the *Squirrel,* a wretched little barque of only ten tons burden. Of these three vessels, one, the *Delight,* was wrecked on the sickle-shaped shoals of that horrible death-trap Sable Island, and of her crew of a hundred men only twelve were saved. Among those who were drowned were the historian and the mineral expert of the expedition.

Sir Humphrey now determined to return to England, but since the tiny *Squirrel* seemed utterly unfit for such a voyage his friends begged him to take his passage in the other, larger ship, which was named the *Golden Hinde.* The gallant knight replied, "I will not forsake my little company going homeward, with whom I have passed so many storms and perils."

They made first for the Azores, and so far had fair weather, but leaving these islands ran into a heavy gale. The people in the *Golden Hinde* saw the *Squirrel* almost swamped by a huge wave. She rose again, and immedi-

ately afterward Sir Humphrey was observed by those in the *Hinde* seated in the stern with a book in his hand. They heard him call out, "Courage, my lads. We are as near Heaven by sea as by land," and that was the last ever seen or heard of the gallant knight on this earth. Darkness fell, and during the night the poor little ship with all her crew was swallowed by the greedy sea. Such was the end of one of the finest of all English adventurers.

CHAPTER XIV

NORTHWARD HO!

More Northern Discoveries—The Voyages of John Davis—The Dutch take a Hand—The Discoveries of Barentz—A Winter in the Arctic.

THE merchants of London were not satisfied with the voyages of Martin Frobisher. They thought it a pity that he, who had originally gone in search of the Northwest Passage, should have changed his purpose to a hunt for gold. A number of them clubbed together to outfit a new expedition, and two small ships, one of fifty, the other of thirty-five tons, were made ready.

The commander chosen was John Davis. John Davis was a Devon man born near Dartmouth about the year 1550, and was known as a brave and good seaman. Sailing from Dartmouth on the 7th of June, 1585, he made a quick passage across the Atlantic, and by the middle of July had reached the western side—that is, the far side—of Greenland. The coast looked so grim and gloomy that Davis gave it the name of the Land of Desolation.

From this point he sailed to the northwest. The sea was wonderfully free of ice, and he reached latitude 64° 15′ north, where he found land. Here were many Eskimos, who were very friendly. They danced with the sailors and shared with them everything they possessed.

On the 1st of August Davis continued to the northwest,

ESKIMO VILLAGE AT PRINCE ALBERT SOUND

From "My Life with the Eskimo", by Vilhjalmur Stefansson (New York: The Macmillan Company)

THE NORTHWEST PASSAGE
Sir J. E. Millais

and six days later found land again. Once more sailing due north, an open strait was found to the west, which was very wide and quite free from ice. Davis was delighted. At last he felt sure that he had found the long-sought passage. He sailed up it for about a hundred and fifty miles, but then running into heavy fog and contrary gales was forced to turn back. Again he made a very rapid passage homeward, arriving at Dartmouth on the 30th of September.

Once more the hopes of the London traders ran high, and early in the following May Davis sailed again from Dartmouth, this time in a vessel called the *Moonshine,* a very small craft of only thirty-five tons. Five weeks later he was on the west coast of Greenland. Natives came in numbers to trade, bringing sealskins, skins of white hares, and fish. Icebergs surrounded the ships, icebergs of such size that Davis afterward refused to describe them, vowing that no one would believe him. With difficulty he continued his voyage to the north, and found warm weather, an ice-free sea, and hordes of mosquitoes.

This time Davis reached a latitude of 67° north, where he found land to the westward. On the 14th of August he turned south again, still seeking for his channel, and on the 4th of September, in latitude 54° north, he writes that he had "perfect hope of the passage, finding a mighty great sea passing between the two lands to the west." This strait was not the strait now called Davis Strait, but was actually that which bears the name of Hudson, and which leads from the Atlantic into that enormous inland sea which we call Hudson Bay.

In the following year Davis made a third voyage. This time he got farther north than ever before, for he reached 72° north latitude. Here as before he found open sea, and sailed to the west for a hundred and twenty miles without

seeing any land. A northerly gale swooped down upon him, and he was driven to the south, where he arrived at the strait which he himself had discovered during his first voyage. Two of his vessels had been left to fish, and of the small pinnace in which Davis himself was exploring he says that it moved as slowly through the water "as a cart drawn by oxen."

Presently he ran into ice again, and it was all that he could do to get out. On the 30th of July he writes, "We crossed over the entrance or mouth of a great inlet or passage being twenty leagues broad. In which place wee had eight or nine great rases—currents or overfalls, lothsomely crying like the rage of the waters under London Bridge." After this, he adds, "having lost sight of the *Elizabeth* and *Sunshine,* and being very short of fresh water, we steered our course homewards, arriving there on September 5th."

Davis had voyaged farther north than any of those before him, yet even so could find no one willing to send him out again. "This Davis hath been three times employed. Why hath he not found the passage?" was the burden of every one's complaint. In a book written after his return from his third voyage Davis tells an interesting story of his travels. One particularly interesting point is this, that he clearly believed that all the northern regions of the new continent were islands. Time has proved that he was absolutely correct. Unable to obtain further employment in England, Davis afterward entered the service of the Dutch, and made no fewer than five voyages to the East Indies.

The Dutch, like the English, lived largely by trade, and about this time began to busy themselves with an attempt to discover the Northeast Passage. The Dutch Government offered a reward of twenty-five thousand florins to

any one who should make the passage, and promised that the discoverer should have all the trade rights for a period of eight years.

It was in the year 1594 that the first Dutch voyage was made. Cornelison was admiral, and the famous William Barentz was chief pilot. Four ships were fitted out and left the Texel on the 5th of June. The little squadron arrived at the mouth of the Kola River in Lapland on the 23rd of May. Here the ships separated, Cornelison sailing through the Waigatz Straits, while Barentz directed his course to the north of Nova Zembla.

To their astonishment they found the weather very warm and the mosquitoes most troublesome. The island of Waigatz was green with grass and beautiful with flowers. Over and over again Arctic voyagers have commented on this summer warmth in the far Arctic, and quite lately Doctor Stefansson has written a book on the subject in which he points out and proves that winter cold is no greater in the Arctic than it is a thousand miles and more to the southward.[1]

The Dutch admiral, passing through the Straits, reached a deep blue sea quite free of ice, and feeling sure that he had at last discovered the long-sought passage, returned to Holland with the good news.

In the meantime Barentz reached Nova Zembla on the 4th of July, and followed the shore toward the north up to 27° 25′ north latitude, where he was stopped by ice. He returned southward, and meeting great herds of walrus decided to load his ship with walrus tusks, which make valuable ivory. Barentz was the first to give us an accurate description of the walrus. "This sea-horse is a wonderful strong monster of the sea, much bigger than an oxe, which keeps continually in the seas, having a skin like a sea-calfe

[1] "The Northward Course of Empire", by Vilhjalmur Stefansson.

or seale, with very short hayre, mouthed like a lion, and many times they lye upon the ice. They are hardly killed, unlesse you strike them just upon the forehead. It hath four feete, but no eares; and commonly it hath two young ones at a time. And when the fishermen chance to find them upon a flake of ice with their young ones, shee casteth her young ones before her into the water, and then takes them in her armes, and so plungeth up and downe with them: and when she will revenge herself upon the boates, or make resistance against them, then she casts her young ones from her againe, and with all her force goeth towards the boate; whereby our men were once in no small danger, for that the sea-horse had almost stricken her teeth into the sterne of their boate, thinking to overthrow it, but by means of the great crie that the men made, she was afraide, and swomme away againe, and tooke her young ones againe in her armes. They have two teeth sticking out of their mouthes on each side, each being about halfe an ell long, and are esteemed to bee as good as any ivorie or elephant's teeth."

Returning from Nova Zembla, Barentz rejoined the Admiral, and the expedition returned to Holland. In the following year the Dutch Government fitted out fresh ships, Barentz again acting as chief pilot. But the fleet did not start early enough in the season, and on reaching Nova Zembla found the sea already frozen. There was nothing for it but to return home, and the Government, disgusted at the failure of two costly expeditions, refused any further help.

But if the State had closed its purse strings, there were still merchants of Amsterdam who thought it worth while to make a fresh attempt. Two vessels were made ready, to which Barentz was again appointed pilot. The commander was Jan Cornelison. They set sail on the 18th

"ICEBERGS SURROUNDED THE SHIPS"

SLEDGING OVER THE ARCTIC PRAIRIE IN SUMMER

From "My Life with the Eskimo", by Vilhjalmur Stefansson (New York: The Macmillan Company)

of May, but on reaching Nova Zembla Cornelison and Barentz differed as to the best course; Barentz, however, gave in, and followed his commander to the north.

On the 9th of June they saw an island on which was one great polar bear, so they called it Bear Island. Ten days later they discovered a much larger island in 80° 11′ north latitude. "This land," says Barentz, "the most northern which to this time hath been discovered in the world, has nevertheless verdure and herbage. The animals are white bears, some larger than oxen; reindeer who feed on moss and become so fat that their flesh is excellent eating; here are also foxes, white, grey, and some black. It is named Spilbergen, signifying sharp-pointed mountains."

Here also were enormous numbers of red geese sitting on their eggs. These birds were well known to the Dutch, for they visited Holland in winter. Now for the first time their breeding place was discovered.

For a second time differences arose between the two commanders. Cornelison wished to examine the east coast of Spitzbergen, but Barentz was anxious to try for a passage to the eastward in a more southern latitude. In the end the two ships parted company, and Barentz steered for Nova Zembla, which he reached early in August. Pushing his way along the west coast, on the 26th of August he doubled the northeast cape of the island. Heavy fog hid the sea, and when it cleared the ship was beset by floating ice. The floes closed in upon her and lifted the ship completely out of the water, turning her almost on her beam ends. It was hopeless to get her free, and her crew, consisting of seventeen men, found themselves obliged to spend the winter on this Far Northern coast.

Barentz did not lose heart, but set his men to build a house.

Happily there was plenty of driftwood, and the hut was finished on the 2nd of October. These were the first Europeans to be forced to spend the winter in the Arctic, and the experience was a terrible one. Each day the cold grew more and more intense. Their Danzig beer froze so hard as to break the casks, while the beer itself was quite spoiled. "It seemed," says Barentz, "as if fire had lost all power of conveying heat. Our stockings were burned before the feet felt any warmth, and this burning was announced by smell rather than by feeling."

On the 4th of November the sun disappeared, and after that darkness lasted for eighty-one days. On the 24th of January they had a glimpse of the sun again, which was a matter of great surprise, for Barentz had declared that the sun could not be seen for another fifteen days. He was, however, unaware of the curious power of refraction which belongs to the atmosphere of the Far North.

The cold remained intense until April. As soon as the thaw came, the two ship's boats were dug out from under the vast snowdrifts which had covered them; and on the morning of the 14th of June the little party bade farewell to the desolate spot where they had passed eight terrible months. Two days later their brave commander, who had long been ailing, became worse. He asked his men to lift him up in the boat, and while he was gazing upon the bleak coast his spirit passed away. Of his crew of seventeen men, twelve reached their homes in safety.

Two hundred and seventy-four years later—that is, in the year 1871—a modern explorer, Captain Carlsen, found Barentz's winter quarters exactly as he had left them, and in 1875 part of his journal was recovered by another explorer.

CHAPTER XV

THE ARCTIC SEAS

The Story of Henry Hudson—His Tragic Fate—The Further Exploration of Hudson Bay by Captain Button—How the Arctic Whale Fishery started.

IT speaks well for the pluck of the English merchants that all these failures to discover either a northwest or a northeast passage did not discourage them.

Early in the seventeenth century a company of London merchants boldly decided to try to send ships across the North Pole, and for this attempt they chose as commander Henry Hudson. Of this man we know absolutely nothing until we find him in command of a small vessel belonging to the Muscovy Company in May, 1607. We do not even know the name of the vessel, but she must have been very small, for her crew consisted of only ten men and a boy.

In this Hudson crossed the Atlantic and reached the coast of Greenland in latitude 70°. Sailing two hundred miles to the north, he saw that the country was free from snow. Here again we are told of the cold diminishing toward the North Pole. "The air," says Hudson, "was temperate, and rain fell in large drops like thunder showers in England."

From Greenland Hudson sailed right across to Spitzbergen, and here found much ice. He noticed the fact that

where the sea is blue the ice is usually thick, whereas a green sea is frequently quite clear of ice. He went as far as 80° north latitude; then since stores were failing he was forced to return.

In the following year his employers gave him a somewhat larger ship with a crew of fourteen men, and directed him to make an effort to find a northeastern passage to China. It was during this voyage that Hudson made the discovery that the North Pole and the Magnetic Pole are not the same.

When between Nova Zembla and Cherry Island one of Hudson's men, "looking overboard saw a mermaid, and calling up some of the company to see her, one more came up, and by that time shee was close to the ship's side looking earnestly on the men; a little after a sea came and overturned her. Her form was like that of a woman, her body as big as one of us, her skin very white, and long haire hanging downe behind, of color black; in her going downe they saw her tayle which was like the tayle of a porposse and speckled like a macrell. Their names that saw her were Thomas Hilles and Robert Rayner."

Ice was so thick between Spitzbergen and Nova Zembla that Hudson could not force a passage, so steered homeward, arriving safely at Gravesend on the 26th of August.

It seems that the Muscovy Company refused to give Hudson fresh employment, for in the next year we find him in the service of the Dutch East India Company, but of this voyage we know comparatively little, except that he coasted North America and discovered the bay and river on the shores of which New York now stands. This river, the Hudson, is of course named after him. It was the good account which Hudson gave of this part of the country which caused the Dutch to found New Amsterdam, as New York was first called.

"HUDSON WAS SEIZED AND BOUND" 126
Stephen Reid

And now we come to Hudson's fourth and most famous voyage, the one from which it was his sad fate never to return. Sir John Wolstenholme, Sir Dudley Digges, and others fitted out a vessel named the *Discovery,* of fifty-five tons, and gave the command to Hudson. It would appear that the orders they gave him were to search for a northeast passage, but Hudson seems to have been convinced in his own mind that this was useless, so sailed to the northwest. At the end of June he reached Resolution Island, which had been charted by Davis.

Unable to go to the north of it, Hudson took a southerly course, and arrived on the coast of Labrador. Here his ship fell "into a great rippling or overfall of current, the which setteth to the west." This was the entrance to the wide strait which reaches into the sea now known as Hudson Bay.

The straits were much blocked by ice, but ice was not the worst trouble with which Hudson had to contend, for his crew were turning mutinous. Juett, the mate, and Wilson, the boatswain, had been behaving so badly that the commander had had to degrade them. Aboard the ship was a young man of the name of Green. Green, it seems, had got into trouble in England, and Hudson had befriended him and taken him with him to serve as clerk. This fellow was, however, a very bad lot. He had no gratitude toward Hudson, and was already planning to destroy the man who had been so kind to him.

Still in trouble with ice and contrary winds, Hudson stuck to his westerly course, passed through the Straits, and reached the great inland bay. For three months he explored among vast number of small islands until it was too late to retreat. On the 1st of November he was forced to beach his ship, and ten days later she was frozen in. At the beginning of the winter white partridges and other

birds were so plentiful that all had enough to eat; but later on food grew so scarce that the men were forced to feed on moss and frogs.

It was not until April that the ice broke up; then some quantity of fish were caught, and when the sea was at last clear Hudson decided to make the best of his way home. With tears in his eyes he distributed to his crew what provisions remained, barely enough for fourteen days.

Green and his rascally associates, knowing that there was not enough food to last the whole of the crew for the voyage back to England, made up their minds to get rid of their captain and of the eight sick men. It was on the morning of the 21st of June that the conspiracy broke out. As Hudson came out of his cabin he was seized from behind and bound. With the eight sick and lame men he was forced into the boat. A fowling piece, some ammunition, a small quantity of meal, and an iron pot were given to them. The tow-rope was cut, and the unfortunate little party set adrift. To this day no one knows how Hudson and his poor cripples fared or what was their end.

The mutineers elected Green as their captain, and under his command the ship reached Cape Wolstenholme. Here Green, with Wilson, Rickett, and others, went ashore to barter with the Eskimos. The Eskimos attacked them, and Green was killed on the spot. Of the others, five were badly wounded, four of them dying of their wounds.

The six survivors managed to kill about three hundred birds, and with this wretched provision started back across the Atlantic.

Their sufferings were horrible, for the birds gave out, and they were forced to live on candles. Even these had come to an end by the time they sighted Berehaven on the Irish coast, from which place they were taken in a fishing-smack to Plymouth. Here they were put in prison, and so

ends one of the most splendid and the same time most sordid stories of English exploration.

Hudson's discovery revived the hopes of those who believed in a northwest passage, and in the year 1612 the London merchants fitted out two ships called the *Resolution* and the *Discovery* for the purpose of exploring this new opening toward the west. The command of the expedition was given to Captain (afterward Sir Thomas) Button.

Button, entering Hudson's Strait, followed his orders to keep due west. He discovered Southampton Island, and pushing still farther to the westward fell in with the mainland of America. Coasting southward he entered the mouth of Nelson River, which has since been one of the principal posts of the Hudson's Bay Company. Here he decided to winter, and profiting by Hudson's experience set to work to collect plenty of food. It is said that his men captured nearly twenty thousand partridges.

Although the winter was long and gloomy, Button managed to keep his men busy and interested, and in the following April launched his vessels again and explored the greater part of the huge bay. He then returned to England, where he gave his opinion that a northwest passage did exist, although he had not been lucky enough to find it.

In 1614 Captain Gibbons, a relative of Button who had been with him on his voyage, was sent to make a fresh attempt to find the way round North America. Gibbons reached the coast of Labrador, but met with such masses of ice that he could do nothing.

With a perseverance beyond all praise, the Muscovy Company refused to give up hope, and in 1615 made ready the *Discovery* for still another voyage. The command was given to Robert Bylot, while the mate was the famous Baffin. Baffin had already made one voyage in the Arctic three years earlier. He seems to have had much knowledge

of the theory as well as the practice of navigation, for in a letter which he wrote to Master John Wolstenholme he speaks of having seen the sun and moon at the same time near Resolution Island, and how he was so enabled to find the exact latitude.

He continues, "If observations of this kinde or some other were made at places far remote, as at the Cape Bona Speranza [that is, the Cape of Good Hope], Bantam, Japan, Nova Zembla, and Magellan Straits, I suppose we should have a truer Geography than we have."

The *Discovery* reached the coast of Greenland on the 6th of May. Enormous icebergs were visible, some of which rose two hundred and forty feet above the sea, and so must have been nearly seventeen hundred feet in thickness. Turning to the southward, they reached Hudson Strait, and again were in much peril from ice.

Bylot stood away to the north up the strait now known as the Fox Channel. On the 12th of July he sighted a great cape, which they called Cape Comfort. Here a strong current setting in to the westward revived their hopes of a passage in that direction. But luck was against them, the wind veered, and the ship was driven back. There was nothing for it but to return, and on the 8th of September they came to anchor in Plymouth Sound, without the loss of a man.

In 1616 the *Discovery* sailed once more, and reached Davis Strait. On this coast were numbers of Eskimos, wretchedly poor and living on raw seal's flesh. Baffin pushed on toward the north, but the weather was so dreadfully cold that even on Midsummer Day sails and ropes were frozen hard.

Baffin refused to be discouraged, and forced his way westward until he reached a great opening which he called Sir James Lancaster's Sound. It was solid with ice, and

seeing that it was impossible to proceed farther, Baffin turned and made for the coast of Greenland. His men were so ill with scurvy that few were able to handle the sails, but on the coast of Greenland they found scurvy grass and sorrel, of which they made salads, and the men soon recovered.

Scurvy was then the curse of all crews making long voyages. In those days the virtues of lime, or rather lemon, juice as a cure for this disease were unknown. The men were forced to live entirely on biscuit and salt meat, and after a few weeks of this sort of diet the whole crew would be down with this dreadful complaint.

Leaving Greenland on the 6th of August Baffin made a quick passage, and arrived safely in Dover Roads on the 30th of the same month. "For the which," says Baffin, "and all other His blessings, the Lord make us thankfull."

Of the worthy Baffin himself we know very little, except that later on he went to the East and was killed in a battle.

If all these various voyages failed in their object of discovering either a northeast or a northwest passage, they were yet useful in proving the riches of the Arctic Seas. At that time the teeth of the walrus were extremely valuable, and as early as 1603 Steven Bennet had been sent in a small vessel to the coast of Lapland to see what he could do in the way of trade. Here he found quantities of walrus, but his men did not understand the art of killing these monstrous creatures, and succeeded in taking only fifteen.

Three years later he did better, for in a fortnight he collected three hogsheads of teeth and twenty-two tons of excellent oil. The teeth became so valuable that in 1609 the Muscovy Company sent five ships to Cherry Island. Many bears were killed, a quantity of valuable fur collected, and three lead mines discovered. Two walruses

were brought home and exhibited in London before "the King and many honourable personages."

This appears to have been also the beginning of the Northern whale fishery, for in the year 1611 Jonas Poole was sent in the first ship despatched from England for the express purpose of killing whales. Poole had with him six Biscayans, men skilled in the art of whaling, and with their aid took no fewer than thirteen whales.

Two years later more than twenty ships, French, Dutch, and Spanish, besides six from England, were busy hunting whales in the Sea of Spitzbergen. It was about this time that the English took possession of Spitzbergen, and stopped the ships of other nations from fishing there.

CHAPTER XVI

HAWKINS AND DRAKE

The First Slave Traders—The Treacherous Attack on Hawkins—Drake sees the Pacific—How he carried out his Vow.

DURING all the first half of the sixteenth century England was content to leave Central and South America in the hands of the Spaniards who had discovered it. Spain, backed by the Papal bull or decree which had given to her the whole of these new lands, was able to keep them to herself. During all this period England and Spain were at peace.

At the same time, a good many Englishmen sailed in Spanish ships and settled in Spanish towns in the New World. Others found a home in the Portuguese settlements on the West African coast.

Now the Spaniards had always had trouble in finding slaves to work their new plantations in America. The Indians were not good workers. They fled from the Spaniards, and those who were captured and enslaved had a troublesome habit of dying. By far the best workers, then as now, were African Negroes. It was the English who first began to supply the Spaniards with slaves imported from Africa, and one of the first of these slave dealers was that very famous Englishman, Sir John Hawkins.

John Hawkins was the son of an old sea captain, William

Hawkins. It is possible that William Hawkins was a slave trader, but we cannot be certain about that. We do know, however, that John Hawkins, who from boyhood had been engaged in trade with Spain and the Canaries, in the year 1562 took a cargo of slaves from Sierra Leone to the West Indies.

AN EARLY MAP OF THE NEW WORLD (1540)

His cargo amounted to three hundred slaves, of whom he sold two hundred to the Spaniards. The other hundred he had to leave as a sort of bribe to the Spanish governor. Hawkins did not mind this, for he had already received such a quantity of merchandise that "he did not only lay on his own ship with hides, ginger, sugars, and some quantity of pearls, but he freighted also two other hulks with hides and other commodities."

His success enabled him to undertake a second voyage on a much larger scale, a voyage which won him wealth and also his well-known coat-of-arms, the crest of "a demi-moor bound and captive." It was in the year 1566 that Hawkins fitted out this second slave-trading expedition.

"HAWKINS LANDED WITH WELL-ARMED FOLLOWERS"

Stephen Reid

QUEEN ELIZABETH VISITS THE "GOLDEN HIND" AT DEPTFORD
Stephen Reid

He had already founded and fortified "factories" on the Guinea coast where slaves could be collected all the year round.

It is interesting to note that young Francis Drake sailed with Hawkins on this second voyage, in command of the *Judith,* a small vessel of fifty tons.

But trouble was brewing, for the Spaniards had orders from home that they were not to trade with the English. When he heard this Hawkins told the governor of Hispaniola, "You can do as you like, but if you refuse to trade, then you had better stand to your arms, for I mean to trade."

The colonists still refused to trade, and the result was a fight, in which Hawkins got the better of the Spaniards, and so forced them to buy most of his slaves. But that was the end of it; for when Hawkins reached Jamaica he found that not one of the Spaniards would trade with him. He tried Cuba with equally little success, and afterward visited Florida, where he found a French colony which was in rather a bad way. Hawkins civilly offered to take the French back to their own country, and in the end he sold them one of his ships and went on his way.

This second voyage, like the first, was extremely profitable, for in spite of his lost trade Hawkins had brought home with him a good store of gold, silver, and pearls. He had done something else, for when news arrived in Spain of the way in which he had forced the Spaniards to trade, King Philip was furious, and sent an angry message to the English Government. The result was that Queen Elizabeth refused Hawkins permission to make a third voyage.

Hawkins, however, was not the sort to let a little matter like a quarrel between two countries upset him. He interviewed Queen Elizabeth personally, and somehow managed

to get her leave to make a third voyage. This expedition, consisting of six vessels, left England in October 1567. Again Francis Drake was with Hawkins, sailing in his same little *Judith.*

Reaching Cape Verde, the English began to hunt for slaves. The natives shot poisoned arrows at them, and Hawkins himself was wounded, but was cured by some herbs which an old negro mammy gave him. With much trouble his men collected some five hundred slaves, which they took across the Atlantic to the Spanish colony of Dominica. Here they sold a number of the slaves and then set out for Hispaniola. But the Spaniards at once showed fight and fired upon them. The English returned the compliment, and a round shot from Drake's ship went slap through the house of the Spanish governor. Hawkins attempted to parley, for he wanted fresh water for his ships, but the Spanish governor would have nothing to say to him. This was foolish, but the fact was that the Spaniards as yet knew little of the character of the men with whom they had to deal.

Hawkins and Drake landed with two hundred well-armed followers, and with a loss of only two men captured the whole Spanish settlement. The unhappy governor was now forced to buy two hundred slaves, and the English, having got all they wanted, sailed away to Cartagena on the coast of Colombia.

Here again the Spaniards refused to trade, and since Cartagena was well fortified Hawkins left it and sailed north. His fleet ran into a hurricane, and Hawkins' own ship, the *Judith,* was almost knocked to bits. Her topmasts were blown away, her rudder broken, and she leaked badly.

Hawkins now decided that the only thing to do was to run for the fort of San Juan de Ulloa, an old Spanish

settlement on the coast of Central America. On the way he took three Spanish ships, carrying passengers, among whom were a number of important Spanish officials. His idea was to hold these as hostages, and in exchange claim "victuals for his money and a quiet place for the repairing of his fleet."

Early in September Hawkins' six ships reached the port of San Juan, where he found a fleet of Spanish treasure ships ready to sail for Spain. Hawkins did not interfere with the treasure ships, but sent a message to the Spanish governor telling him what he wanted, and offering him the prisoners whom he held in return.

While he was waiting for a reply a dozen big Spanish warships arrived for the purpose of escorting the treasure ships back to Spain. Hawkins knew that his battered fleet would stand no earthly chance against the heavily armed Spanish war vessels, so put some of his guns ashore and built a fort. In this way he prevented the Spanish warships from entering the harbor.

The Spanish admiral was furious, and sent a message to Hawkins, saying, "I am the Viceroy of the King. I have a thousand men at my command, and I mean to come in." Hawkins answered, "If you are Viceroy of the King of Spain, so am I for the Queen of England, so come if you will."

The Spaniard, whose fleet was still outside the harbor, and at the mercy of any storm that might arise, had sense enough to see that Hawkins had all the better of the game, so asked the English captain for his conditions. Hawkins stated them plainly. He was to be allowed to buy food and to trade, hostages were to be exchanged, and no Spaniard was to land armed.

To these conditions the Spaniards agreed, but while Hawkins had every intention of keeping his word it is very

plain that the Spaniards were already planning treachery.

A few nights later Hawkins was at dinner aboard his ship, entertaining his hostages, when one of them sprang at him and attempted to stab him. One of Hawkins' men was just in time to save his captain's life, and Hawkins at once gave orders for the traitor and his companions to be put in irons. Next moment there was a crash of firing, and the Spanish flagship, a great vessel of nine hundred tons, was pouring shot into Hawkins' battered ship.

The fight that followed was a wonderful one. Although hundreds of Spaniards boarded the English vessel Hawkins and his little crew drove them overboard. What is more, his gunners put a shot into the magazine of the Spanish flagship and blew her sky-high with three hundred men.

But the other Spanish ships were all round the English vessels, and the latter were forced to slip their cables and, still fighting, sail out of the harbor. Two, the *Angel* and the *Swallow,* were lost, but four of the Spaniards were sunk.

In the end Hawkins escaped with only two of his smallest vessels, the *Minion* and the *Judith.* But his troubles were not even now at an end. Bad weather came on, his two ships were separated, and he was left alone in the little *Minion.* In this ship he at last struggled home, to find that Drake and the *Judith* had reached England a few days earlier.

Strictly speaking, this adventure of Hawkins is not one of discovery. It is, however, important, because it led up to the first great clash between Spain and England, and had as its direct result the journeys of Sir Francis Drake and of other Elizabethan adventurers.

Francis Drake was one of twelve children of Edward Drake of Tavistock, in Devon. Like Columbus, he had followed the sea from boyhood, and, as we have seen, when

little more than twenty-one years of age was already in command of his own ship.

After the disaster which ended Hawkins' career as slave-dealer Drake made two more voyages to the West Indies. These were in 1570 and 1571. During these two voyages he kept his eyes open for any way in which he might get even with the Spaniards for the loss and damage which he had suffered at their hands, and with this idea in view he searched for and found a harbor which he could turn into a fortified base from which to fight his enemies. This harbor was in the Gulf of Darien. He called it Port Pheasant, and buried there a quantity of stores ready for future use.

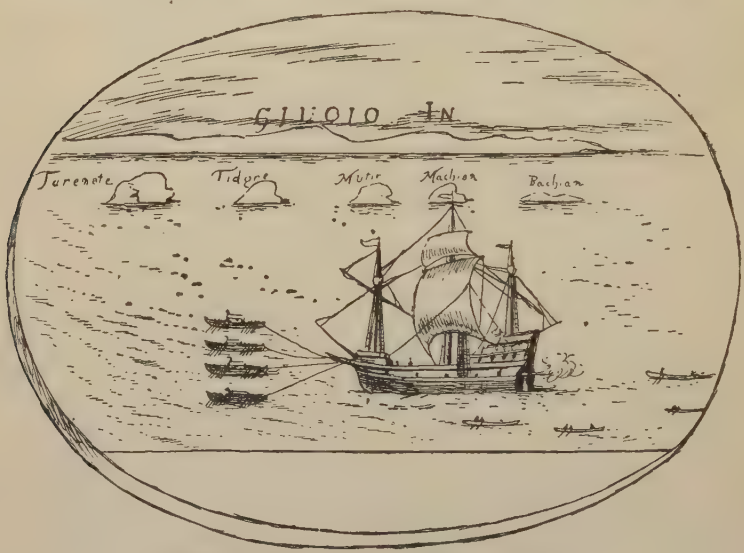
In the year 1573 some Indians of Panama led him across the isthmus to the top of a hill on which grew a huge tree. He climbed this tree, and from it saw for the first time the great Pacific Ocean on which no English ship had yet sailed. There and then he made up his mind to be the first of his countrymen to invade the Pacific, and to plunder the Spanish ports on the western coast of South America.

It was not, however, until November, 1577, that Drake was able to embark on his famous voyage, in which he was backed by Queen Elizabeth, who promised him a thousand crowns. Drake left Plymouth on the 15th of November, 1577. He had five ships, the largest of which was the *Pelican,* of one hundred tons only. With these he sailed down the Spanish and Portuguese coasts, capturing several prizes on his way.

But trouble was brewing. Unknown to himself, Drake had traitors aboard, the worst of them being Thomas Doughty, who had always pretended to be Drake's very good friend. Doughty accused John Drake, brother of Francis, of stealing and hiding some of the treasure they

had taken. Francis Drake, very angry, ordered search to be made. Nothing was found in John Drake's possession, but a quantity of plunder was discovered hidden in Doughty's sleeping place.

Doughty was sternly reprimanded and brought aboard the *Pelican,* where Drake thought he would be out of temptation. Then the fleet sailed right across the Atlantic for Brazil. During the whole of the passage Doughty, who



THE "GOLDEN HIND" IN THE MOLUCCAS
From a Dutch print of about 1595

was really in the pay of Drake's enemies, contrived to stir up trouble. At last the fleet, having weathered several storms, reached Port St. Julian, that gloomy spot on the Patagonian coast where many years earlier the explorer Magellan had hung his mutineers. And now Drake, his patience quite exhausted, took the traitor ashore and beheaded him. It was a dreadful thing to have to do, and Drake felt it so deeply that for days afterward he was hardly able to speak.

Two of the smaller ships which had become unseaworthy had been broken up for firewood. With the three remaining vessels Drake reached the Straits of Magellan on the 20th of August, 1578. Before entering the strait and sailing into the Pacific, Drake changed the name of the *Pelican* to the *Golden Hind*. This was in honor of Sir Christopher Hatton, who had always been Drake's good friend, and whose crest was a golden hind.

Cape Horn has always had an ill name with sailors, and the passage through the Straits was a terrible one. Fierce gales howled between the giant cliffs, and through the thick mists huge snow-clad mountains reared their heads. One of Drake's remaining ships was wrecked; another, the *Elizabeth,* was separated from the *Golden Hind* and returned home. So it was with one ship only that Drake at last reached the ocean on which he had so long desired to sail.

At once he turned northward, and running up the coast of Chile obtained fresh provisions from the natives. From the Indians he heard that a great galleon lay at anchor a little to the north of Valparaiso, and determined to take her. Never in their worst nightmares had the Spaniards ever dreamed of an English ship invading the Pacific. They had not even troubled to fortify any of their ports there, and when the *Golden Hind* appeared off Valparaiso they of course supposed her to be Spanish, and beat their drums in welcome.

A terrible surprise was in store for them, for a few minutes later a score of hard-bitten English sailors were scrambling over the side of the great treasure ship. Of her crew, only one escaped and swam ashore, where he raced through the town, shrieking out the terrible news that the English had arrived.

With his hold full of treasure worth nearly a hundred

thousand pounds and provided with plenty of fresh food, Drake sailed north again. He raided Lima on the Peruvian coast; still voyaging northward he caught the huge *Cacafuego* with such a treasure as had never before fallen to the lot of English adventurers.

With such wealth in his ship, Drake now determined that he would not risk returning by the way he had come. He boldly decided to cross the Pacific and return by way of the Moluccas. But first he coasted up past Nicaragua and Mexico until he reached California, where he put into a small harbor near what is now San Francisco and took possession of the country in the name of the Queen. He was thus the first Englishman to see California, though not the first European, for some Spanish ships had already ventured as far north.

Some accounts say that Drake actually went as far north as British Columbia, but it is not now believed that he went farther than latitude 43° north. Having provisioned his ship, he then turned boldly westward across the Pacific, and for sixty-eight days was out of sight of land.

At last he reached the Pelew Islands, where he refitted and rested for three weeks. From the Pelews he made for Java, where again he got fresh provisions. Thence he sailed for home right round the Cape of Good Hope, arriving in England on the 26th of September, 1580. In the following April the queen herself visited the *Golden Hind* at Deptford and knighted Drake on his own quarterdeck. And so ended the first voyage of an Englishman round the world.

CHAPTER XVII

SIR WALTER RALEIGH

Raleigh's Vain Attempts at colonizing Virginia—How he tried to restore his Fallen Fortunes—His Search for the City of Gold.

BY the middle of the sixteenth century the fisheries of Newfoundland had become well known and very important. In the year 1578 fifty English vessels, a hundred Spanish, fifty Portuguese, and a hundred and fifty French were already at work catching the vast shoals of cod which are still found in those shallows known as the Newfoundland Banks. Also a number of Biscayan ships were engaged in whale fishing in the same waters.

Although the English ships were at first less numerous than those of other nations, they were yet better built and better equipped for the work; and it would seem that even in those days the English were well ahead of all their rivals in the fishing business.

Then came the settlement in Newfoundland by the followers of Sir Humphrey Gilbert, and by the end of the sixteenth century no fewer than two hundred English fishing-vessels with crews amounting to eight thousand men, went every summer to these wonderful fishing-grounds.

The death of Sir Humphrey Gilbert was a serious matter for the new settlement. But it was not long before a successor was found able and willing to carry on the good

work. This was Sir Humphrey Gilbert's half-brother, the even more famous Walter Raleigh.

Walter Raleigh was born at Hayes near Budleigh in Devonshire in the year 1552. His mother had been previously married, and had had two sons, Humphrey and Adrian Gilbert. Walter Raleigh went to Oxford when only fourteen years old, but left in 1569 to become a soldier.

Of the next nine years of his life we know little, except that he fought in France. In 1578 he joined Humphrey Gilbert and sailed with him in his first voyage. Two years later he helped to subdue the rebellion in Ireland, and in 1581 returned to England and went to Court. Young Walter, now about twenty-nine years old, was a splendid-looking man. He was tall and handsome, with dark hair, strongly marked features, and a high color. He was not only good-looking, but had plenty of brains and a quick wit, so he soon became a great favorite with the queen. She was very generous to him, and gave him trading privileges which made him a rich man.

In 1583 Raleigh risked the sum of two thousand pounds in Sir Humphrey Gilbert's last expedition, and when he heard of his death at once got from the queen a new charter of discovery and colonization. The queen granted him territory two hundred miles in every direction of such "remote heathen and barbarous lands as were not yet taken possession of by any Christian people."

Raleigh's first expedition was put under the command of Captains Amadas and Burlow, who sailed in two ships to the coast of Florida. Florida in those days included not only the State which now bears that name, but also much country to the northward. Amadas and Burlow arrived somewhere on the coast of what is now Georgia, and from this point coasted northward until they came to Wokoken, an island on the coast of North Carolina. Here

they made friends with the natives. News of their arrival spread inland, and forty or fifty chiefs visited them.

The English traded with the Indians, who gave as many as fifty valuable skins in exchange for a copper kettle. They were told of a great city, a week's journey inland, where the King lived, but did not attempt to visit it. Reaching England again in September, they brought their news to London, describing the new country as a perfect Paradise. In honor of the Queen the newly discovered land was named Virginia.

The next year, 1585, saw a new expedition, this time under that famous fighting man, Sir Richard Grenville. He landed a number of men at Roanoke on the island of Wokoken to form a colony. Then he returned home.

These colonists seem to have been foolish folk. Instead of settling down to farm, they made expeditions inland, and a number were killed by Indians. In the following summer their stores were finished, and they were nearly starving when they saw English ships passing up the coast. This was the fleet commanded by Sir Francis Drake, then returning home from beating the Spaniards in the West Indies. The colonists begged permission to sail home with him, so that when Sir Richard Grenville did arrive he found the new colony empty and abandoned.

Sir Richard made a second attempt to found a colony, and landed fifty men with provisions for two years. But, like the others, these men wasted their time in vain search for gold and pearls, and so this second settlement ended like the first.

In all Sir Walter fitted out no fewer than seven expeditions, spending on them the sum of forty thousand pounds, equal to many times that amount in our money to-day. Yet not one of his colonies proved a success, and in the end Raleigh found himself practically ruined.

It was these failures on the part of Sir Walter Raleigh that caused him to undertake his amazing expedition to the Orinoco.

And now I must do a little explaining. Two immensely rich empires, those of Mexico and Peru, had already been discovered by the Spaniards, and millions upon millions of treasure had been stolen from the unhappy natives and poured into Spain. At this date every one believed that there existed a third great native empire somewhere in South America. Guiana was the name given to this empire, and it was said to be as large and as rich as the other two put together.

The Spaniards had made one attempt after another to find Guiana, but few of their expeditions sent into the heart of the giant continent had ever returned. Among those who had come back was one Juan Martinez, who was "master of the munition" to the Spanish General, Ordez. This man declared that he had seen the great city of Manoa, or El Dorado, the capital of Guiana. Raleigh had the story from Berreo, the Spanish Governor of Trinidad.

Martinez declared that he had lived for seven months in Manoa, to which city he had been led blindfold by the Indians. He said that he entered the city at noon, and then they uncovered his face, and that he traveled all day till night through the city before he came to the palace of the Inca. At the end of his stay the Inca sent some of his men to conduct him to the river of Orenoque, the same which we call the Orinoco, and that he traveled down the Orinoco to Trinidad in a canoe.

Fresh information came from Peter de Urra, another Spanish adventurer, who claimed to have visited Manoa in 1541. His story was that he had not entered the city, but had seen it from the top of a mountain. Its size, he said, was enormous, and in the center was a vast temple in

which he was told were golden idols representing a woman and her children. Still another traveler, called Santos, claimed to have visited the city, and said that the roofs of the houses were covered with gold and silver.

Now whether there was any truth at all in the stories of these three men is difficult to say. Even to-day we know so little of the interior of Brazil that we cannot state with certainty what exists there. But one thing we are sure of, which is that this golden city, if it ever existed, was nowhere near the Orinoco, but very much farther to the south. From a document which may still be seen in the archives of the city of Rio we know that a Portuguese expedition sent out about the year 1757 did discover the ruins of a vast city in the highlands south of the basin of the Amazon. This city had evidently been destroyed by a great earthquake, but the remains were splendid enough to show that once it must have been the center of a wonderful civilization.

Raleigh at any rate firmly believed in Guiana and its golden capital, and no doubt had the firm idea that he could find it, and so enrich not only himself, but his country. In the year 1595 he sailed with five well-found ships and reaching the island of Trinidad, which lies opposite the mouth of the Orinoco, seized the Spanish colony of which Berreo was governor. Berreo himself had made a vain attempt to find Guiana, and told Raleigh that such a search was useless. He said that if Raleigh really intended to sail up the Orinoco this was the wrong time of the year to do it, for it was the beginning of the rainy season, when the current would be too strong to fight against.

The English, however, believed that Berreo was merely trying to defeat their plans, so Raleigh sailed for the mouth of the great river.

Now the Orinoco finds its way into the Atlantic by a great number of different mouths, of which only seven are

navigable. Raleigh soon found that it was impossible to take any of his ships into the river, so had no choice but to start in open boats.

It was a bad beginning. A hundred men with arms and provisions for a month only were crowded into three small boats, and had not gone far before they found themselves quite lost in a hopeless tangle of narrow waterways. To make matters worse, the swamps were already flooded, and there was no place on which to land or cook. The Indians who inhabit these swamps live in flood-time in the tree-tops, and Raleigh's men could not get into touch with them. Luckily for them, they caught an old Indian fishing, and he, being kindly treated, consented to act as pilot.

The difficulties were terrible, for the climate was intensely hot, while malarial mists hung heavy over the swamps, and many of the English sailors went down with fever. But Raleigh struggled on, and getting clear of the swamps reached a point three hundred miles from the sea. Here he met an Indian chief, said to be a hundred and ten years old, whose name was Tapiowary. This ancient man told Raleigh a deal about the country, and seems himself to have believed in the existence of the city of gold.

From this point the expedition pushed on for another hundred miles. Raleigh speaks of the wonderful beauty of the country, of hills, thick with forest, of great open plains covered with fine green turf, of herds of deer and thousands of birds of brilliant plumage.

Raleigh was now four hundred miles from the coast, and had been away from his ships for a month. The weather was growing worse; torrents of rain fell every day. There was no sign of his golden city, and he had no choice but to return. He took with him a quantity of ore which from its glittering yellow color he believed to be full of gold. He also took a son of old Tapiowary.

He reached the coast in safety, and it is a wonderful tribute to his powers of leadership that in all those eight hundred miles of dangerous voyaging he lost one man only, a Negro who was seized and eaten by a crocodile.

Reaching the mouth of the river, Raleigh found that his ships had returned to Trinidad, so he himself was forced to cross the dangerous Dragon's Mouth in his open boats. From Trinidad he returned to England.

But he had not found the city of gold, and his gold ore proved to be worthless. In the following year he sent Captain Lawrence Keymis to the gold mine which he said he had discovered, but Keymis either could not or would not find it. Later another ship sailed under Captain Berry, but this expedition was also a failure.

This was the beginning of Raleigh's downfall. The King of Spain, who hated him bitterly, had long been demanding his death, and a few years later Raleigh was stripped of all his offices and sent to the Tower.

Later, as history tells us, he was accused of plotting against the king. He was condemned to death, and on the 29th of October, 1618, was cruelly beheaded.

CHAPTER XVIII

THE ROMANCE OF POCAHONTAS

The Settlement of North America—Jacques Cartier explores the St. Lawrence—The Adventures of Captain Smith—The Princess Pocahontas.

THE attainder of Raleigh cancelled his patent of discovery, and so opened Virginia to new settlers. Long before Raleigh's attempt to colonize in North America French adventurers had done a certain amount of exploration farther to the north. In the year 1534 Jacques Cartier, who had sailed to explore Newfoundland, went beyond that island and entered a great bay, which was in fact the mouth of the river St. Lawrence. Indians told him that the name of the river was Hochelega, and said that it was so long that no one had ever reached its source.

Cartier went up the river in his ship as far as the isle of Orleans. Then he anchored, and went on in boats. The Indians, at first friendly, objected to his going farther, and tried to frighten him by dressing up as devils.

Cartier, however, was not seriously alarmed, and went on for thirteen days until he arrived at the Indian town of Hochelega. He speaks with delight of the great beauty of the country, the splendid oaks, elms, and maples. Close to the Indian village was a fine hill to which Cartier gave the name of Montreal.

Cartier speaks of the Indians' use of a certain herb which

THE BOYHOOD OF RALEIGH

Sir J. E. Millais

Photo W. A. Mansell

RALEIGH JOINS HUMPHREY GILBERT ON HIS FIRST VOYAGE
Chris Ambler

they bruised to powder and put in a pipe, laying upon it a small piece of burning coal. They then, he says, "suck at the other end and fill their bodies full of smoke till it comes out of their mouths and nostrils as from the chimney of a house." "We tried," he adds, "to use this smoke, but on putting it into our mouths it seemed as hot as pepper." Whether this herb was really tobacco or the Indian substitute made of willow bark we do not know.

The Indians told him of great lakes, and of an inland sea of fresh water so large that it had never been explored. They told him too of the great Saguenay River which runs into the St. Lawrence from the north, and which is said to be the deepest river in the world. Their chief, Donnacona, informed Cartier that there were white men in the Saguenay country whose dresses were of woollen cloth like those worn by the French. This seems a strange story, but it is possible that these were some of the Labrador adventurers who had been captured by the Indians and brought inland.

Cartier and his crew wintered in the St. Lawrence. The cold was intense. The ice, he says, was two fathoms in thickness, and the snow lay four feet thick on the deck. Many of the men were frostbitten, and, worse still, that dread disease scurvy affected them until the survivors had no strength to dig graves for their dead. It was an Indian who saved the survivors by showing them a tree from the leaves of which they made a sort of tea which cured them.

In the following spring Cartier returned to France, and in consequence of the good account which he gave of this new country several attempts were made to found colonies. But like the early English colonies these failed, and it was not until the year 1608 that the city of Quebec was founded. By this time the English had got firm foothold in Virginia, and I must now give some account of how this came about.

In the year 1605 a certain Captain Weymouth was sent from England to Virginia to find a good place in which to found a colony. Weymouth discovered Long Island, and came back with glowing accounts of the beauty of the country and the excellence of the soil. A company was formed in London, and two years later, in 1607, three vessels under command of Captain Newport reached the mouth of Chesapeake Bay. Here a hundred and ten settlers were landed and founded Jamestown, which is the oldest English settlement in the United States.

Most of these colonists were of the same sort as those who had made such a mess of the earlier settlements. They did not want to work: all they cared about was to search for gold. Nor did they know how to handle the Indians, with whom they were soon in trouble.

Luckily there was among them a certain Captain John Smith, one of the most wonderful adventurers of even that adventurous age. John Smith had fought in the Hungarian army. He had been taken prisoner by the Turks, and by them sold as a slave to the Tartars. He had wandered all over Asia, and had come to understand not only the value, but the necessity for discipline. John Smith was also a man of letters, for we know that he read the classics. It was this man who saved the colony of Jamestown.

The council which had been formed to govern the new colony was jealous of John Smith, and at first refused to allow him any share in the management. This council made a dreadful mess of things. The colonists, many of whom were men of bad character, stirred up trouble with the Indians, and the Indians attacked the settlers and killed several of them. John Smith was the only man among the colonists who understood this sort of fighting, and the rest were only too glad to accept his help.

Captain Smith took charge. He drilled the Englishmen, and built a fort and attacked the Indians so fiercely that they soon learned to keep their distance. As soon as he got the better of the Indians he set to work to explore Chesapeake Bay. For this purpose he had nothing better than an open boat, yet in this he coasted some three hundred miles, and discovered the Potomac River.

In ascending the river he took risks which very nearly proved fatal, for when the stream became too rapid to allow the heavy boat to progress up it he went ahead in an Indian canoe with two Englishmen and two Indian guides. About twenty miles above the rapids Captain Smith went ashore to shoot game. When he returned to the river he found that his two companions had been killed and that a number of Indians in their war paint were waiting for him.

There were a hundred or more of these savages, all armed with bows, and it seemed certain that next moment he would be pierced by scores of arrows. But Smith had been in many tight places during his wanderings in Asia. He did not lose his head, but seizing one of his two Indian guides he held the man in front of him and used him as a shield. So he managed to save his life, but he could not prevent himself from being taken prisoner.

The Indians decided to burn him alive, and for this purpose tied him to a stake. Yet even in this dreadful danger the English leader kept his courage. It so happened that he had a compass in his pocket. He showed this to his captors and explained to them its uses, and managed to interest them so greatly that they decided to take him to their chief.

This chief was the celebrated Powhatan, who seems to have ruled over a large tract of country. Smith found the chief surrounded by his stern-faced warriors, while his women stood behind him. Powhatan recognized Smith as

the man who had already done so much damage to his people, and at once decided to execute him. Smith was dragged to a rock and held with his head upon it, while an Indian in full war paint stood over him with a great club, ready to dash out his brains as soon as Powhatan gave the word.

It was at this critical moment that Pocahontas, eldest daughter of Powhatan, sprang out from the knot of women who were standing at the back of the chief's tent, flung her arms round the Englishman and declared that if he must die she would die with him. Even Powhatan's savage heart was touched, the order for execution was deferred, Smith's bonds were cast off, and he was allowed to rise. There followed a council, and in the end Captain Smith was allowed to leave on condition that he sent a ransom of beads, looking-glasses, and other articles most prized by the Indians.

Smith returned to his colony to find that everything had gone to pieces during his absence, and it was only with the greatest difficulty that he succeeded in restoring order. Meantime the Indians were planning a big expedition to wipe out the invading English. This plan would probably have succeeded but for the devotion of the Princess Pocahontas, who stole through the woods by night at risk of her life to warn Smith of the plot.

It is sad to think that her kindness was so ill rewarded. She was taken prisoner and held as a hostage. Yet even as a captive the Indian girl grew more and more fond of the English. Her greatest friend was young John Rolfe, who seems to have been a better sort than most of his companions. In the end Pocahontas was baptized by the name of Rebecca, and married to John Rolfe. This news pleased her father, and from that time onward Powhatan showed himself a good friend to the English settlers.

The Princess, now Mrs. Rolfe, visited England, where she was much admired. John Smith, who had been injured by an accidental explosion of gunpowder, had already returned to England, and it was in London that he and the Princess met again. It seems clear that Smith himself had never realized how fond the Indian girl had been of him. The interview between the two is said to have been very affecting.

There accompanied Pocahontas to England a relative of hers, an Indian named Vitomotomakkin, who was not only a chief, but a medicine man. Powhatan had given this man orders to find out as much as he could about England, and in particular he was to send word how many people there were in the country. For this purpose the medicine man had brought with him a bundle of sticks, such as even to-day are used by some Indian tribes for tally purposes. The moment that Vitomotomakkin landed at Plymouth he began to cut notches, one for each person whom he saw. He stuck to his task while on the road from Plymouth to London, but arrived in the capital flung away his sticks in despair. When he returned to America he told Powhatan that it was as hopeless to number the English as to count the leaves of all the trees in the forest.

King James had now succeeded Queen Elizabeth. He was, as we know, a weak king, and we are told that he was alarmed for fear Rolfe might aspire to be King of Virginia through his wife. King James seems even to have had some idea of putting Rolfe and his wife in prison. Happily there were those about the Court who had more sense, and Rolfe and his royal wife were allowed to go free. But the poor princess did not live to return to her own country. The cold and damp of England killed her, and she died at Gravesend in March, 1617, when on the point of sailing for her home. Quite lately a search has been

made for her tomb, but it is not known exactly where she was buried.

For two years it was very doubtful whether the English colony in Virginia would live or die, but in 1609 no fewer than five hundred fresh colonists arrived in nine ships. Lord Delaware was appointed Governor. Order was restored, and the settlers began to cultivate tobacco and to export it. This trade brought them money from Europe, and was the turning point in their history. A little later the Bermuda Islands were taken possession of. At that time their only inhabitants were great herds of pigs, all descended from a few animals left there years earlier by the Spaniards. These pigs proved of immense value in supplying meat to the new colony.

The Indians, however, had been so badly treated by the set of scamps who formed the first Virginian colony that they had come to hate all white men and to kill them at sight. It was this hostility on the part of the Red Men that for long checked the spread of colonization. Attempts on the part of the English to plant fresh colonies farther to the north failed utterly, and it was not till 1620 that the Puritans were able to found the town of New Plymouth in Massachusetts.

CHAPTER XIX

TRADING WITH THE EAST

Jenkinson's Journey to Bokhara—The First Englishman in Japan—The Story of William Adams.

I MUST now go back a little and tell something of explorations in the East. I have spoken of an attempt made by English merchants in the year 1527 to send out an expedition toward the North Pole. I have also told of Chancellor's success in opening up trade with Russia.

All through the sixteenth century English merchants were doing their best to establish trade with the East, but without much success, for English trade in that direction was hampered by the jealousy of the Portuguese, who had most of it in their own hands. The principal rivals of the Portuguese in the East were the Venetians, who carried on the trade by way of the Red Sea, and it was the Venetians who at that date supplied England with silks, spices, and other Eastern merchandise. That trade continued nearly to the end of the sixteenth century. The last of the Venetian vessels that visited this country was a great ship of eleven hundred tons, which was wrecked off the Isle of Wight in the year 1587.

After Chancellor's visit to Moscow it was found that the Russians were trading overland with Persia and

Bokhara, so the London merchants decided to make inquiries regarding this trade. For this purpose they chose Mr. Anthony Jenkinson, who is said to have been "a resolute and intelligent gentleman", and who had already been English ambassador at Moscow.

Jenkinson left Moscow in April 1558, and traveled southeast toward the Caspian. He gives a melancholy account of the state of the country. The people had suffered horribly from civil war, plague, and famine. He reached the town of Astrakhan, which was defended with forts built of mud. The people, he says, lived mainly on fish, especially sturgeon. These were hung up everywhere to dry, the odor was horrible, and everything swarmed with flies. The Tartars who lived in the neighborhood were so wretchedly poor that they were actually offering their children for sale, and the price of a boy or girl was no more than the value of a loaf of bread. In his report Jenkinson adds that there is no hope of trade in such a poverty-stricken country.

On the 6th of August Jenkinson sailed down the river Volga and entered the Caspian Sea. His companions, who were Persian merchants, knew so little about navigation that Jenkinson himself had to take charge of the ship. In the Caspian pirates tried to seize the ship, but one of the crew, a Mohammedan saint, persuaded these fellows to leave them alone.

It took no less than three weeks to reach the port of Manguslav, at the southeastern end of the Caspian, where Jenkinson landed and went eastward with a caravan of a thousand camels. In about a week the caravan arrived in the country of Timour Sultan. Timour at once demanded a heavy toll on all the merchandise, but Jenkinson had the good sense to go straight to the Sultan and claim his hospitality. The Tartar prince received him kindly, and fed

JENKINSON CLAIMS THE SULTAN'S HOSPITALITY 160

Stephen Reid

him on horse flesh and mare's milk. The Sultan, says Jenkinson, had no town or fort. He lived in a small round house built of reeds covered with felt and hung with carpets.

Traveling onward, the caravan passed through a savage desert. For three weeks not a house was seen and hardly a human being. Food ran short, and they had to kill some of their camels and horses for meat. They also suffered from thirst, for there were no rivers, and such few wells as they found had little water, and that so salt as to be hardly drinkable.

"All the country," says Jenkinson, "from the Caspian Sea to the city of Urjenz, is called the land of Turkman. The people dwell in tents, roving in great companies with their camels, horses, and sheep, which last are large and have tails weighing sixty or eighty pounds. Many of the sheep as well as horses are wild, and are taken by means of hawks, who worry them till they are no longer able to run. The Khan and his five brothers rule the whole country. Each is king in his own territory and seeks to destroy the rest, as they are born of different mothers, and are commonly the children of slaves. When these brothers are at war, which is commonly the case, he who is vanquished flies to the desert, and there robs travelers and caravans till he can gather strength to take the field again."

The next part of Jenkinson's journey was along the bank of the river Oxus. The Oxus rises in the tremendous tableland between the Tau Shan Mountains and the Hindu Kush, and flows into the Sea of Aral. It is a curious river, for it is larger nearer its source than at the mouth. Running as it does through desert, it dwindles like the Nile. In this desert Jenkinson and his companions were attacked by a band of robbers, but after a great fight managed to drive them off. After traveling a hundred miles, they

reached the city of Bokhara, which is the capital of the khanate of that name.

The city of Bokhara, Jenkinson tells us, was very large, and fortified with an immense wall of earth. But the houses were wretchedly mean and the people miserably poor. The Tartars and the Persians were always fighting one another, and the chief difference between them seems to have been that the Persians flatly refused to shave their upper lips, a custom universal among the Tartars.

It was from Bokhara that Jenkinson had hoped to start trade with China, but he found that for the last three years there had been war between Tashkend and Cashgar, and that these troubles made it impossible to do anything in the way of trade. It was equally impossible to trade with Persia, because on that side also fighting was going on. So there was nothing for it but to return home, and in March, 1559, Jenkinson and his followers left on their long journey. They were only just in time, for barely a week later the city of Bokhara was besieged by the King of Samarkand.

When they arrived at the Caspian Sea they found their ship still in the harbor where they had left her, but a band of roving Tartars had completely stripped her rigging. There was not a rope left. How Jenkinson succeeded in refitting the ship we do not know, but somehow he managed it, for on the 2nd of September he arrived safely in Moscow. Here the Tsar received him, and Jenkinson presented to him a Tartar ambassador who had accompanied him, and also some Russian slaves whom he had ransomed.

The Tsar asked Jenkinson to dine with him, and he did so, but at a separate table. The Tsar, however, sent him delicacies from his own table, the waiter being a Russian duke.

Although Jenkinson was not able to open up trade with

China, his journey did a good deal for the geography of that time. In earlier maps the Caspian Sea had been shown more than twice its proper size. Jenkinson had made careful notes of the latitudes of the places through which he had passed, and he not only reduced the Caspian to its real size, but was able to give particulars of the route across Central Asia to China.

The failure of Jenkinson's journey put an end to further attempts to open up trade with the East by an overland route; but a little later several efforts were made by the English merchants to send ships to the East Indies. The first, made in 1591, was a flat failure, but in the year 1601 five ships were sent out under the command of Admiral Lancaster, loaded with English goods. These ships were fitted out by the newly formed East India Company, which had been established in December, 1600. The expedition was successful. The English established a settlement in Java, made treaties with several native princes, and did not lose a man on the whole voyage.

Up to this time the Portuguese had done most of the trading between Europe and the East Indies, but now the Dutch had begun to take a hand. In the year 1614 the Dutch had a fleet of twenty-seven large ships trading in the Eastern seas, and were making handsome profits. It is interesting to note that it was through an Englishman that the Dutch first obtained entry into the ports of Japan. This was in the year 1598, when five Dutch ships left Holland to sail by the Straits of Magellan to Japan.

The pilot of this fleet was a man named William Adams, English by birth, but who had been in the Dutch service for some years. This voyage began in disaster, and although the ships reached the Pacific Ocean they were then driven apart by storms, and never again sighted one another.

The ship of which Adams was in charge held its course

for Japan, and did in the end arrive there. But by that time only five of her crew were able to stand and work the ship. They had no sooner cast anchor than the Japanese came on board, and without asking any one's leave took all the cargo out of the ship. The Portuguese, who had already got a footing in Japan, were much alarmed at the appearance of the Dutch, and told the Japanese that these newcomers were pirates. Adams and his men were put in prison, and it seemed likely that they would all be crucified, that being the usual punishment for piracy.

Luckily for them the Mikado, who had heard of the arrival of this foreign ship, ordered Adams to be brought before him, and poor Adams, shaking in his shoes, was led into the Imperial presence. The Emperor at once began to ask him questions, and Adams answered them as best he could. When the Emperor asked about the way by which the Dutch ships had come from Holland, Adams showed him a chart of the Straits of Magellan, and this interested the Japanese ruler very deeply. At first, it would seem, he had an idea that Adams was drawing the long bow, but the Englishman answered all questions so honestly that the Emperor could not doubt him. Indeed, Adams must have made a very good impression on the Emperor, for he was most kindly treated, and after a while was set at liberty and allowed to visit his Dutch comrades, who were still in prison.

Adams found that his ship had been stripped not only of her cargo, but also of her compasses and other instruments. When he told the Emperor of his trouble the latter was indignant, and ordered that Adams should be paid full value for all that had been stolen, but when Adams begged that he might be allowed to refit his ship and sail for home this request was refused.

Adams and his men, although not allowed to leave Japan, were permitted to travel where they pleased in the country, and they lived in comfort for about five years. Then one day the Emperor sent for Adams and ordered him to build a ship on a European model. The request staggered poor Adams, for, as he said, it was his business to steer a ship, not to build one. But the Emperor would not listen, so Adams determined to do his best, and in the end he succeeded in building an excellent little craft of about eighty tons. The Emperor was delighted, and gave Adams a good piece of land and a number of coolies to work it. A little later Adams built a second ship for the Emperor, this one larger than the first.

Adams was still very anxious to get home, but the Emperor would not give him leave to do so. About this time a Dutch vessel came to Japan from India, and Adams gave a letter to the captain asking him if possible to send it to Gillingham in Kent, the town in which he was born.

It is on account of this letter that I have included Adams among my discoverers, for in it he gives a better account of Japan than had up to that time reached Europe. He describes its size and shape, and tells a good deal about Japanese habits and customs and their law. This letter seems to have arrived in England in the year 1612, and had the result of bringing an English ship commanded by Captain John Saris out to Japan.

Through the influence of Adams the Emperor gave the English leave to trade all through Japan. Saris himself took advantage of the Emperor's kindness to see the principal Japanese cities. He says that no fewer than four of them were as large as London. He describes the great temples, one of which he says was as large as St. Paul's Cathedral. His account of the country is even fuller and more interesting than that of Adams.

When Saris left he carried with him a long letter from the Emperor of Japan to the King of England, the first ever exchanged between rulers of the two countries. Adams was not allowed to return with Saris, and lived in Japan until his death in 1631.

From the visit of Saris to Japan English trade began with that country, but was much hampered by the jealousy of the Portuguese. This trouble, however, soon came to an end, for the Japanese themselves rose against the Portuguese settlers and killed them all; yet, even so, English trade in Japan did not last long, for an Imperial edict was issued which put a complete stop to it.

The reason why this edict was issued is a very curious one. The Japanese had news that Charles, King of England, had married a daughter of the King of Portugal. So hated were the Portuguese in Japan that this was enough to finish the English in Japanese eyes, and the Emperor stopped all trade with England. It must be remembered that in Japan, in those days, an Imperial edict, once issued, could never be reversed.

CHAPTER XX

EARLY AFRICAN EXPLORATION

The Strange Story of Andrew Battel—Jobson and the Crocodiles—The Beginning of the French Colonies in Africa.

AS we have seen, the Portuguese were the first Europeans to open up trade along the west coast of Africa. They obtained a decree from the Pope granting them a monopoly of this trade, and refused to share it with any one else. As early as the year 1481 certain Englishmen fitted out ships to trade on the Gold Coast, but the Portuguese king at once sent ambassadors to Edward IV, complaining so bitterly that Edward forbade the expedition. After that no English vessel attempted to visit West Africa for more than seventy years.

In the year 1553 English merchants made up their minds to have another try, and two well-armed ships under Captain Windham sailed for the coast of Guinea. Windham, who was a surly brute, treated his Portuguese pilot so badly that the whole expedition came to utter grief, Windham himself and most of his men dying of fever. But the merchants were not discouraged, and in the following year three more ships were sent. These did very well indeed, for they brought home nearly four hundredweight of gold and two hundred and fifty fine elephant's tusks besides spices and other goods. This was the start of the British Guinea trade, but for some years it was carried on

only along the coast. It was not until the year 1589 that any Englishman went inland.

Andrew Battel was one of those men who became an explorer, not through set purpose, but by accident. In the year 1589 he sailed from London in a small vessel bound for South America. Caught in bad weather, the crew nearly died of starvation, but at last reached the little island of San Sebastian on the coast of Brazil. Here the men hurried ashore to pick fruit and catch fish, but five of them, Battel among them, were caught by Indians and taken as prisoners to Rio de Janeiro. Here they were flung into gaol by the Portuguese, but after six months Battel was released to act as pilot to the governor's pinnace. For some months he was thus employed, but all the time badly treated, as a heretic and an Englishman.

But Battel must have been a good man, for presently the governor gave him command of a vessel to trade with the African coast. He did so well that he gained his freedom, and when a Dutch ship arrived he slipped aboard, meaning to work his passage home. Unluckily for him he was betrayed by a Portuguese seaman, and just as the ship was about to sail was caught and dragged back to prison, where he lay for weeks in irons, expecting every day to be put to death.

But a white man's life, and especially the life of so good a sailor as Battel, was too valuable to the Portuguese to be lost, and in the end Battel was released and sent to Masangarno, a Portuguese settlement in West Africa, where he was employed in fighting the natives. Here he spent six wretched years.

In the fort of Masangarno were some Moors and Egyptians, who, like Battel, were slaves to the Portuguese. Battel made friends with three of the Egyptians and persuaded them to try to escape. They got hold of a canoe,

and were joined by seven of the Portuguese themselves. On a dark night these ten men, with Battel in command, slipped silently away down the river, and paddled hard till dawn, when they went ashore and traveled twenty-four hours across land without finding a drop of water. Then they met an old Negro, who promised to act as guide; but he misled them, and once again poor Battel fell into the hands of the Portuguese. He was hauled off to St. Paul, where he was kept in heavy irons for three months.

Chance was once more his friend. The natives were so troublesome that the Portuguese released the Englishman to help in fighting them. For some time Battel was in command of a force of Portuguese criminals, a sort of lost legion, condemned to serve for life in wars with the Negroes. Badly wounded, Battel was sent back to St. Paul to recover, and when his wound was healed was once more employed as a pilot. His first work was to steer a ship to the Bay of Cows, where live cattle were purchased from the natives.

Here they found the country overrun by the Giagas, a tribe of ferocious cannibals who had come up from Sierra Leone. These people were willing to trade, and as they had an immense number of prisoners the Portuguese were soon busy buying up these slaves at a very cheap rate. The Giagas, who were on the south side of the river Cova, were anxious to cross in order to destroy the Benguelas, and the Portuguese commander actually ferried these savages across in order to continue their campaign of murder.

"The prisoners," says Battel, "were brought into the camp alive, while the dead were eaten by the Giagas, who delight in man's flesh, though they have plenty of cattle."

Presently the Giagas, having wiped out the wretched Benguelas, marched inland, and the Portuguese, hoping

to obtain more slaves, followed them. But the Giagas marched too fast for them, and vanished into the forest. Blundering after them, the Portuguese were caught by a native chief and forced by him to help in conquering a neighboring tribe. When their work had been completed the Portuguese commander wished to return, but the negro prince refused to allow this unless a hostage was left. The Portuguese naturally chose Battel for this unpleasant position. They had, however, the decency to leave him a musket and ammunition, and their commander promised to return in two months with new forces.

Needless to say, the Portuguese had no intention whatever of keeping their promise, so when the two months were up Battel was led out for execution. The chief, however, decided that he should not be killed at once; but he was so cruelly treated that he took the first chance of escaping and managed to reach the camp of the Giagas. And so began Battel's career as an explorer.

Battel had hoped that the Giagas would travel far enough to the west for him to reach the coast, but for a long time the cannibals marched through the mountain country inland, burning and killing as they went. Battel speaks of passing great mines of copper, of quantities of wild peacocks, and of grassy plains covered with buck and other game. At last, after eighteen months of this wandering, he managed to escape, and reached the Portuguese settlement of Masangarno.

Battel describes the Giagas as a nation of outlaws. He says that as war is their only occupation they kill all their children and recruit their forces from the young men of conquered tribes. There are still cannibals in West Africa, but happily none quite so dreadful as these Giagas.

Battel's wanderings were not yet over. At Masangarno he was well received by a new governor and promoted to

be sergeant. As sergeant he served for two years, and then petitioned to be allowed to return home. His request, however, was refused. Every three years a new governor was appointed, and when the time came for this change Battel slipped away into the woods. His idea was that since a new governor usually pardoned all deserters he might in this way obtain a fresh chance of liberty. He had with him a musket and some ammunition, and he hid himself near the town, hoping every day to hear that the new governor had arrived. Instead he got news that the new governor was not coming for another twelve months, and since he did not dare go back there was nothing for it but to take to the woods again.

Somehow he made his way to a lake called Kasansa, a place where he knew there was much game; and here he lived for six months on what he could shoot. But he got terribly tired of this Robinson Crusoe sort of life, and made up his mind to escape, so he set to work and built a kind of boat, which, since he had no nails, he fastened together with wooden pegs. With his knife he cut out a pair of oars, and from his blanket he made a sail.

Launching his boat on the river Bengo, he managed to gain the sea, and then had the great good luck to be picked up by an English ship, the captain of which was an old acquaintance. And so in the end Battel made his way back to England, from which he had been absent for no less than fifteen years. He settled down at Leigh in Essex, and his neighbor Purchas published an account of his amazing adventures.

In 1588, the year before Battel left England, Queen Elizabeth had granted a patent of African trade to a company of Exeter merchants. This company carried on a certain amount of trade with Senegal and with Gambia. They sent out iron implements, and seem to have got a

certain amount of gold in exchange. In the year 1594 a letter came from an English merchant in Morocco saying that a Moor, a Portuguese agent, had lately come across the desert from Timbuctoo with thirty mule loads of gold. It is not in the least likely that there was any truth whatever in his story, but, for all that, it led to a new company being formed in London for the purpose of getting some of this African gold.

The commander chosen to lead the expedition was named George Thompson, and he sailed in the year 1618 with orders to go as far as possible up the Gambia, a river which empties into the Atlantic just south of Cape Verde. He was to leave his ship in the river and go on upstream in boats. This he did, but while he was away up the river the Portuguese, always jealous of any interference with their trade, stole his ship and killed all the crew remaining in her.

Thompson managed to send a message to England asking for help, and two ships were sent out under the command of Richard Jobson. Jobson, who seems to have been a very good man, found that Thompson had gone a long way up the river and had reached a place called Tenda, where he had been murdered.

Jobson left his vessel at a village named Kassau, and went up the river in boats. But the goods which he had brought with him did not find any sale. What the natives all wanted was salt. Many negro chiefs came down to the river bank, but they bought little. On Christmas Day Jobson met a chief who was very friendly, and who sent him a boat load of fresh elephant meat, which was badly needed.

For a whole month Jobson pushed on up the river, until he reached the rapids of Barraconda. Here the stream became swift, and rowing against it was very hard work.

The heat was terrific, and the men suffered greatly. Jobson would have traveled by night, but the rapids were so dangerous that this was impossible. The farther they went, the more empty became the country. The river was filled with "a world of sea horses whose paths as they came on shore to feed were beaten with tracks as large as a London highway." On every bank lay hundreds of huge crocodiles basking in the sun. Many elephants were seen grazing in the tall grass along the river banks, and in the woods were troops of baboons, which threw sticks at the voyagers, and, as Jobson says, "seemed to converse among themselves."

On the 26th of January Jobson arrived at Tenda, the place where Thompson had been killed, and here he met Buckar Sano, who was the principal merchant of the town. Buckar sold provisions to Jobson, and was appointed English agent.

At Tenda Jobson again found that the great need of the people was for salt, and he much regretted that he had not loaded his boats with this commodity. The iron which he had brought was not in request, for the natives themselves were skilled workers in this metal and also in brass. Buckar Sano told Jobson that six days' journey from Tenda there was a town called Mombar, where there was much trade in gold.

So once more Jobson pushed on, and a very queer journey he seems to have had. He says, for instance, that there were so many crocodiles in the river that the water reeked of musk, and could not be drunk even when boiled. He speaks too of the torpedo, which is a fish able to give electric shocks, and which badly frightened his men. He tells a curious story of a silent traffic carried on between the Moors and a negro nation living somewhere in the interior who had never been seen by white men. Jobson reached Mombar,

but found no gold there, so returned home. It was many years before any other European traveled as far inland as Thompson and Jobson had done.

About this time the French were trying to establish trading posts in the west of Africa, and in the year 1637 a wealthy young Frenchman named Jannequin took a voyage up the Senegal, which is a larger river than the Gambia and runs out to the north of Cape Verde. The Senegal is a difficult river, for it has a very bad bar across its mouth, and in its higher reaches is very rapid and dangerous.

Jannequin seems to have traveled about two hundred miles up the river. He writes that the banks were covered with mango trees full of fruit, and that the forests were empty and full of echoes. The principal kings of the country, according to this explorer, were the King of Lybia, the King of the Foolies, the Chief of the Moors of Barbary, and the King of the Berbers, who ruled over the country around Timbuctoo. But Jannequin's geography was very badly mixed, for he declared that all the kingdoms he had mentioned are watered by the river Niger. Plainly he supposed that the Senegal River was a part of the Niger, and this mistake persisted for nearly a hundred years.

Later a Frenchman named Brue went up the Senegal as far as a place called Gallam, and established a fort there; and after him another Frenchman named Compagnon traveled through the same country and made friends with the native chiefs. Like those who went before him, Compagnon was looking for gold; but although some gold dust was washed from the earth on the river banks, he did not find the metal in paying quantities. To these explorers France owes the beginnings of her important colony of Senegal.

CHAPTER XXI

ROUNDING CAPE HORN

More about the South Seas—The Discovery of Cape Horn—The Mystery of the Discovery of Australia—The Voyage of Abel Tasman—Murderers' Bay.

EARLY in the seventeenth century the Dutch were fighting hard to get that foothold in the East Indies out of which they have since done so well. In that part of the world the Portuguese were their chief enemies. The Dutch East India Company, which was rapidly becoming very rich and powerful, decided that the best way in which to establish this trade was to send their ships by way of South America; and in the year 1614 they fitted out a fleet of six good-sized ships, the command of which was given to George Spilbergen.

The purpose of this voyage was kept very dark, and not even the crews of the ships had any idea where they were bound. For this reason Spilbergen had trouble with his men during the passage across the Atlantic, but he succeeded in keeping the peace, and his fleet reached the Straits of Magellan in safety. While making the passage through the Straits the Dutch saw a giant standing on a cliff and looking down upon the ships. All these early travelers speak of these Patagonian giants, but these very big men seem to have disappeared, for although these

people are no doubt one of the tallest races on earth, yet the average height of the men is only five feet ten inches, and it is rare to find any of them more than six feet two or three inches in height.

Spilbergen's fleet reached the Pacific without meeting any of the usual storms, and sailing northward met a Spanish fleet off the coast of Peru and defeated it. Laden with booty, Spilbergen then sailed for the Spice Islands. His voyage was a wonderful success, and in less than three years from the time he had started he was safe back in Holland without the loss of a single ship.

The success of Spilbergen was a great encouragement to the Dutch, and the Dutch Government decreed that any one who should discover a new passage to India should have all the profits of the first four voyages by the new route as his reward. Now at this time there was living in Amsterdam a wealthy merchant named Isaac le Maire, a man who had a great belief in the existence of such a passage. He talked the matter over with his friend, a sea captain named William Cornelison Schouten, of Horn, and Schouten agreed to try to find this passage. Le Maire fitted up two ships named the *Unity* and the *Horn,* and Schouten sailed, accompanied by Jacob le Maire, Isaac le Maire's son.

Schouten's idea was to go farther south than the Straits of Magellan, round the southern end of what we call Tierra del Fuego. This was not all guesswork on his part, for years earlier Sir Francis Drake had sighted the southernmost extremity of America, and it is quite likely that Schouten knew of this fact.

The two ships sailed from Holland in June, 1615, and Schouten told his men that they were bound for Terra Australis. You must not think that this had anything to do with Australia, a continent which at that time was not

"THE DUTCH SAW A GIANT STANDING ON A CLIFF"
Henry Evison

MEN AND WOMEN NATIVES OF SIBERIA

From "Through Siberia", by Fridtjof Nansen

By permission of Messrs. Wm. Heinemann, Ltd.

yet known to Europeans. It merely meant the southern part of South America.

The voyage was a slow one. It was not until December that the two ships reached the eastern entrance to the Straits of Magellan. Here Schouten met with disaster, for the smaller of his two ships, the *Horn,* caught fire and was quite destroyed. With his remaining ship, the *Unity,* Schouten sailed southward along the curving coast of Tierra del Fuego until he reached Staten Island, which lies off the extreme easterly point of the larger island. He passed through the strait between this island and the other one, and named the strait after his friend le Maire. Struggling against heavy head winds, he presently reached the barren cliff which is the southernmost extremity of the American continent; and this was named Cape Horn, after Schouten's own town.

Here the sea was full of whales, and they saw "sea-mews larger than swans, with wings stretching a fathom across."

The "sea-mew" was doubtless the albatross, a bird which has a wing-spread of twelve or even fourteen feet, and which is found only in the Southern Hemisphere. On the 12th of February Schouten was delighted to find himself opposite to the western entrance of the Straits of Magellan, and so for the first time a European had sailed right round the lower end of the South American continent.

From this point Schouten steered northward for Juan Fernandez, better known as the island of Robinson Crusoe. His idea was to land there and allow his worn-out sailors a short rest ashore. But he had no chart of its shores, and the surf was so heavy that he dared not risk his one remaining ship; so turning westward he continued his voyage across the Pacific.

He visited a number of coral islands, and landed on one where the flies were so numerous that they were a perfect plague. He named it Fly Island.

After a long and difficult voyage Schouten at last reached Java, and put into a port where the Dutch East India Company had a settlement. But le Maire was not a member of this company, so poor Schouten, instead of being received with the honor which he deserved for his new discovery, was put into prison, while his ship was seized by the officials of the Company.

Schouten's discovery of the passage round the Horn gave the Spaniards an ugly shock, for it showed them how useless it was to try to prevent other nations from sending their ships into the Pacific. They themselves, on hearing the result of the Dutch voyage, sent two ships to explore the coast round Cape Horn. It is rather amusing to read that they were obliged to employ Dutch pilots for this purpose.

Although it has been asserted that Magellan sighted Western Australia in the year 1522 during his wonderful voyage round the world, this is doubtful; and the fact is that no one can say exactly who was the first discoverer of the great island continent. There is a French map dated 1542, which is preserved in the British Museum, showing a great island somewhere in that part of the world. In this Australia is called the Land of Java, and is drawn very much in the same shape as it was a hundred years later just before the voyage of Abel Tasman. It seems quite likely that both Spanish and Portuguese ships visited the coast of Australia during the sixteenth century, but the fact is that both these nations were so jealous of one another and of other countries that they kept most of their discoveries as secret as possible, and have therefore lost credit for many valuable finds. It is fairly certain, how-

ever, that New Guinea was discovered as early as 1527 by the Portuguese, but we have no account of this particular voyage. The result is that the Dutch have the credit of the discovery of Australia.

In the year 1606 Luis Vaz de Torres, a Spanish navigator, sailed through Torres Strait between Australia and West Guinea, but did not land. The Dutch vessel *Arnhem* saw Australia in 1618, and in 1627 another Dutch ship sighted the south coast of Australia near Cape Leeuwin. But it was not until the year 1642 that the Dutch Government fitted out two ships for the definite purpose of exploring the mysterious and still unknown continent.

The command of this expedition was given to Abel Jansen Tasman, one of the finest of all Dutch sailors. Tasman sailed first to Mauritius, an island in the Indian Ocean which lies five hundred and fifty miles east of Madagascar. He left Mauritius on the 8th of October, and steered in a southeasterly direction. On the 27th a great deal of weed was seen floating on the sea, and it was thought that the ships were nearing land, so Tasman stationed a man in the lookout and, like Columbus, offered a reward for the first who should see land. But no land was seen for nearly a month. It was the 24th of November before blue mountains were at last sighted in the distance. It was too nearly dark to land with safety, so Tasman gave orders to stand away until morning.

Next day he found himself close under the newly discovered shore, and a very beautiful shore it was. He named it Van Diemen's Land, in honor of Anthony Van Diemen, the Governor-General of the Dutch Republic. With some of his crew he went ashore, but found no inhabitants. They did, however, find trees in which steps were cut, so it was plain that people of some kind lived in this new land. A little later smoke was seen rising in the

trees, and some natives were seen in the distance, but ran away before they could be spoken to.

A week was spent in a harbor; then on the 2nd of December Tasman sailed round the southernmost point of the big island which has since been renamed Tasmania after its discoverer. On the 5th of December the Dutch lost sight of land, and it was not until the 14th that they again approached a coast. Waves broke heavily on barren cliffs; no people were seen, or fires. Tasman's ships sailed along the coast toward the north, and on the 18th found a sheltered bay in which they anchored.

Here, after sunset, lights were seen on the shore, and presently four large canoes came out toward Tasman's ships. The people shouted to the Dutch and blew a sort of trumpet. The Dutch blew their trumpets in return, but the natives could not be persuaded to come very near, and after a time returned to shore.

In the morning canoes were again sighted, but still the natives refused to come close, and the Dutch could make nothing of their language.

"These people as well as we could judge," said Tasman, "were of our own common stature, strong-boned and of a rough voice. Their color is between brown and yellow; their hair black, which they tie up on the crown of the head like to the Japanese, and wear a large white feather upright in it. Their vessels were two narrow long canoes fastened together, upon which boards were fixed to sit on. Their paddles were more than a fathom long, and were pointed at the end. Their clothing seemed to us to be of mats or of cotton, but most of them went with their breast naked."

Since the islanders seemed friendly, the Dutch came close in shore, and were anchoring when seven large canoes came out of a creek, and lay a little way off the Dutch ships. A boat full of sailors was being sent from one ship to another

with supplies, when without the slightest warning the native canoes drove down upon the white men and attacked them. Four of the Dutch were killed; the rest managed to swim away. This treacherous attack decided Tasman to move at once out of such a dangerous neighborhood, and he quickly set sail and stood out to sea. Before they were clear of the bay a great fleet of canoes came in pursuit, but Tasman ordered his men to fire, and drove them off.

MAORI, WITH FEATHER CLOAK AND GREEN-STONE CLUB

In consequence of this attack the bay was named Murderers' Bay. Tasman, in his account of the voyage, writes that this was a very fine country, well watered and fertile, and that he thought it was a part of the unknown continent which he had already discovered. But in this, as we now know, he was mistaken, for the new land, which he named Staten Land, was what we now call New Zealand.

The Dutch ships coasted northward along the shores of New Zealand, trying to find a place where they could land and get fresh water; but the weather was bad, and the surf so heavy that Tasman dared not risk a landing. Many natives were seen who were all armed with clubs, and all, like the first, hostile.

So Tasman made up his mind to sail to the northeast, and for twelve days his ships ran before strong winds. A high rocky island was then sighted which was covered with sea birds, but here it did not seem worth while to land. Two days later two more islands came into view, and here the natives were friendly, and provided the ships with plenty of food. The natives, Tasman says, were tall, handsome people, brown in color. They dived like fish, and were de-

lighted with presents of nails, beads, and looking-glasses. In exchange they gave the Dutch some of their fishing lines, with hooks beautifully made out of shells. They also brought presents of cloth made of tree bark. Although the natives had plenty of coconuts, bananas, pigs, and fowls, they were poorly supplied with fresh water; but when their chief found how badly the white men wanted water he ordered the wells to be made larger. These islands were a part of the Friendly Group which were afterward visited by Captain Cook during his celebrated voyage round the world.

A NATIVE OF BRITISH NEW GUINEA

Sailing toward the west, the Dutch ships visited many other islands, and found most of the natives friendly and willing to trade. Tasman remarks on the fact that the natives of these different islands differed very much in appearance and in color. Some were quite black and had hair almost as woolly as that of African Negroes. Others had their faces painted red, their hair powdered with lime, and pieces of bone stuck through their noses.

A NATIVE OF DUTCH NEW GUINEA

Still sailing to the west, Tasman arrived at the eastern end of the great island of New Guinea and coasted along the northern side. In spite of the fact that the natives of New Guinea have never had a good reputation he managed to trade with them, and at one place bought some thousands of coconuts, as well as a hundred bunches of bananas for his two ships.

Tasman must have handled his ships very well, for in spite of the great distance which he covered he was home again within nine months of the time that he had started. His discoveries were carefully charted, and after his return

home a map of them was cut in stone, and this was built into the new Court House of Amsterdam. To the new continent was given the name of New Holland, by which it was known for many years.

CHAPTER XXII

RUSSIAN EXPLORATION

Discoveries in Siberia—The Russians move East—The Lure of Walrus Ivory—The Two Voyages of Vitus Behring.

I HAVE told you something of the voyage of Richard Chancellor to the White Sea, and his visit to Moscow in the middle of the sixteenth century. Russia was then a comparatively small nation, and one utterly cut off from the rest of the world. Moscow was its capital, for Petrograd did not exist, and its site was nothing but a gloomy swamp. The arrival of Chancellor in Moscow caused a very great sensation in that city, and the trade which was then begun with England stirred up the Russians to do a little discovering on their own account.

At this date Siberia was inhabited only by wandering tribes, and was quite unknown to the Russians. A little later—the exact date we do not know—Russian merchants began to travel into Siberia in search of furs, and it would seem that they not only traded with the tribes, but also conquered them. At any rate, in the year 1558 the Tsar of Muscovy assumed the title of Lord of Siberia. He sent troops into Siberia as far as the great river Obi, and forced the Tartar tribes to pay him a tribute in sable furs. These troops, about six thousand in number, were commanded by a daring adventurer named Yermac Timofief.

Yermac had much trouble with one of the more powerful

Tartar princes, whose name was Kutcham Khan, and made up his mind to smash him. This was no easy task, and Yermac's troops had to march for eighteen months before they got into touch with the enemy. By this time the Russian force had been reduced to only fifteen hundred men, but, small as it was, Yermac utterly defeated Kutcham's army, and became ruler of an immense stretch of country.

Yermas seems to have had some idea of making himself King of Siberia, but he had not enough men. He therefore sent back a message to Moscow, offering all his new conquests to the Tsar and asking for help. This help was sent at once, and Yermac gained fresh victories over the Tartars. But success made him careless, and his old enemy Kutcham Khan fell upon him in the dead of night and destroyed him and his army.

It looked as if this must be the end of Russian rule in Siberia, but such was not the case. Fresh forces were sent out, the Tartars were beaten again, and well-fortified towns were built at Tobolsk and other centers. By degrees the Tartars were all conquered, and the Russians spread as far as the great river Amur, where they first came into touch with the Chinese.

For a time there was peace, but presently the Russians and Chinese traders quarrelled, and war broke out. Having firearms, while the Chinese fought with bows and arrows, the Russians at first defeated the Chinese, but after a few months the Chinese made guns for themselves, and soon the tables were turned. The result was a treaty by which the boundaries of the Russian Empire were clearly laid down.

For a long time the Russian colonists kept chiefly to the southern parts of Siberia, but by degrees the rich fur trade tempted them farther to the north. It was in the year

1644 that a Cossack named Staduchin built a fort on the Kolyma River. When he returned to Yakutsk he brought back a report that he had seen a large island off the mouth of the Kolyma, and that the natives went there across the ice in winter time and came back with the teeth of the sea horse. Now sea horse, or walrus, teeth were so valuable that in the year 1648 a fleet of seven vessels was sent out from the mouth of the Kolyma for the purpose of collecting them. The ships were under the command of a Cossack named Deshniew. Four of these vessels were soon wrecked, but Deshniew with the other three made a very wonderful voyage. Although the account which we have of this journey is very slight and imperfect, it seems beyond any doubt that Deshniew actually sailed along the whole northern coast of Siberia and reached Behring Strait.

Here Deshniew's ship was wrecked, and he, with twenty-five men, wandered across a barren and desolate country for ten weeks, until they arrived on the banks of a river, where they found natives. With these unfortunate people they quarrelled, and in the fight that followed killed them all. Since Deshniew had no ship or even boat, he was forced to remain where he was, and there in the following spring he was found by Staduchin, who had come across land. Deshniew and his men had killed a number of walruses, and collected a quantity of ivory. It was this voyage which resulted in the first discovery by Europeans of Kamchatka.

In the spring of 1696 a little party of sixteen Cossacks found their way into the peninsula of Kamchatka, and in the next year a Cossack officer named Atlassow marched into the country with a number of men. He describes the people as being smaller than other Siberian natives. "They have," he says, "great beards and small faces. They live underground in winter, and during the summer in cabins

raised above the ground on posts, to which they ascend by ladders. They bury their meat in the earth, wrapped in leaves, until it becomes quite putrid, and cook it in earthen vessels which they heat by throwing in red-hot stones. Their cooking smells so strong that a Russian cannot support the odour of it."

From the natives the Russians first heard of the Kurile Islands, which lie in a long string across the top of the Pacific Ocean, between Asia and America. Living among the natives they found a man with black, smooth hair, who burst into tears of delight when he saw the Russians. It seems likely that he was a Japanese, but we do not know for certain.

Having conquered so vast a country as Siberia, one would fancy that the Russians might have been satisfied, but this was not the case. Having seized all they could of the Old World, they were anxious to extend their conquests to the New. Only a few days before he died Peter the Great drew up instructions for an expedition to explore the American coast on the opposite side of Behring Strait, to survey this coast, and to see what harbors there were and what the prospects were for trade.

This was what led to the voyage of Vitus Behring, whose name was afterward given to the great strait which separates Asia from America. Since it was impossible to sail from any Russian port, Behring was ordered to proceed to Kamchatka and there build two ships for the voyage. This of course took a long time, and it was not until July, 1728, that two little ships left what is called the river of Kamchatka.

Behring went north, and sailed right through the straits which bear his name, but he must have hugged the Asiatic coast very closely, for he never once set eyes on the continent of America. But having made certain that the sea did

actually divide the two continents, he returned to the port from which he sailed.

It was not until the year 1741 that Behring was able to undertake his last and greatest voyage. This time he had two vessels, called the *St. Peter* and the *St. Paul,* and in these he left harbor on the 4th of June and stood to the north. After holding a northerly course for some days, Behring decided to turn east, in order to reach America, but just then a thick fog came on, accompanied by high wind. The two ships were separated, and in spite of days spent in searching for them, Behring never saw his companions again.

At last Behring gave up the search, and sailed eastward. Three days later he sighted gigantic snow-clad mountains, one of which rose no less than three miles into the sky. This he named Mount St. Elias. He landed and found traces of natives, but did not see any of them, so he went onward, keeping close to the coast. Soon he found himself among a maze of small rocky islands, which made navigation very difficult and dangerous. Landing on one of these, the only water that could be found was brackish; but the men drank it, and the next thing that happened was an outbreak of that dreadful disease scurvy. Behring himself was attacked by it and left quite helpless, so that his second in command, Lieutenant Waxel, took charge. Misfortune piled upon misfortune, the gale rose again, and for seventeen days the little vessel was driven before it. Only ten men were fit for work, and even those were too weak to furl the sails; so the ship had to be left to drive at the mercy of the wind.

At last, on the 4th of November, high land was seen, and orders were given to anchor. But the anchor rope parted, and the ship began to drive inshore. A second anchor was let go, but again the cable broke, and before a

third could be got ready a great wave caught the ship and carried her right over a ledge of rock into still water.

Behring believed that they were not far from the coast of Kamchatka, but it was late in the season, he had no men to work the ship, and it was plain they would have to spend the winter on the coast of this dreary island. The few of his sailors who were still able to get about went ashore, and built a couple of huts, to which they moved their sick companions; but the cold was so biting that several of these poor fellows died while being carried ashore. Lieutenant Waxel now fell ill, and the situation became desperate. Very little food was left, and they were forced to live on the rank and tough flesh of the sea otter. Steller, the historian of the expedition, says, "Want, nakedness, cold, sickness, impatience, and despair were our daily guests."

On the 8th of December Behring died, but shortly afterward some seals and sea cows were killed, and by Christmas Day most of the sick had recovered. In the following May the survivors began to build a small ship from the timbers of the wreck, but it was not until the 13th of August that she was ready for sea. To their horror, when they attempted to launch her, she hung in the stocks, but after some hours of terribly hard work they at last succeeded in floating her. On the 14th of August they set sail in their crazy little vessel, and three days later sighted the coast of Kamchatka. On the 18th they came to anchor in Awatchka Bay, a Russian settlement, where the people received them as those risen from the dead.

CHAPTER XXIII

THE BUCCANEERS

Exploring the South Seas—Adventures of the Buccaneers—The Voyages of William Dampier—He proves New Guinea to be an Island.

THE Spaniards treated the natives of Cuba so badly that they ended by simply destroying them all, and except for the Spanish settlements on the coast there were no inhabitants left. Now the Spaniards, when they first visited Cuba, had brought cattle from Europe. These ran wild on the rich pastures of Cuba, and increased until they formed immense herds.

Ships visiting Cuba made a practice of sending men ashore to kill these cattle for fresh meat, and by degrees the preparation of this meat became a regular business. A race of hunters arose who killed the beasts and dried and smoked the beef according to the Carib method. The Carib word for smoke-dried beef was "boocan", and the English adventurers who raided these seas and preyed on Spanish commerce lived almost entirely on boocan, and so gained the name of buccaneers.

The buccaneers called themselves "the brethren of the coast", and had their own code of laws. For instance, each buccaneer had a mate, who if he died was heir to all his property. It was from the buccaneers that the privateers were mainly recruited. The early buccaneers had their

headquarters in the little island of Tortuga, to the east of Cuba.

The leader of the buccaneers from 1664 onward was the famous—I should rather say *infamous*—Henry Morgan. It was he who took Panama from the Spaniards, and nearly two hundred mule loads of booty. For this exploit he was knighted, and afterward made Deputy-Governor of Jamaica. One talks of setting a thief to catch a thief, and certainly Morgan, once he had the law at his back, treated his former comrades very harshly.

Now we are apt to think that the buccaneers kept entirely to the West Indies and the coast of Central America, but this is not the case. After Morgan became Governor of Jamaica and began to oppress them, a party decided to try their luck in the Pacific, where they knew that there was plenty of booty.

It was in April 1680 that about three hundred of these sturdy adventurers landed on the east coast of the isthmus of Darien and set out to march across it. Each had a musket, a pistol, and a dirk, but for food they each carried nothing but four cakes of bread called "doughboys." One member of this little force was William Dampier, who afterward became so well known for his voyage in the South Seas. Arriving at Santa Maria on the west coast, they seized some canoes and also a small vessel, and started down the coast. It was not long before they sighted a couple of Spanish ships, which they at once took, and in these they sailed southward for Peru.

The first place at which they touched was the island of Juan Fernandez, where they found the shore thick with seals and sea lions. On the island were hundreds of goats, of which they killed a quantity and salted their flesh. While busy provisioning their ships, three large Spanish ships of war were seen, and the buccaneers, who knew the

odds were too heavy for them, put to sea at once. In their hurry one of their number, William, an Indian who had accompanied them from Central America, was left behind.

The buccaneers made good their escape, and a little later caught a Spanish galleon named the *San Rozario,* with a cargo of wine and oil. In her hold were seven hundred bars of dull-looking metal which the buccaneers took to be tin. So they took one bar only of which to make bullets, and left the rest in the *Rozario,* which they scuttled. Later, when they arrived at Antigua, they were horrified to find that the metal was pure silver, worth seventy pounds a bar. So their ignorance had cost them nearly fifty thousand pounds.

Still sailing south, they explored many islands lying along the southern coast of Chile. They doubled Cape Horn, sailing so far to the south that they found themselves in a tangle of icebergs. They were lucky enough to get out in safety, and at once sailed home to the West Indies.

That was the first expedition of the buccaneers into the Pacific, but not the last. In the year 1683 seventy adventurers sailed from the Chesapeake River in a small ship. Among them were William Dampier and Lionel Wafer, an educated man who afterward wrote some accounts of the voyage. Their ship they knew to be too small for their purpose, and it was their plan to exchange her for a bigger one as soon as possible. The bigger one was a fine Danish vessel mounting thirty-six guns, her hold well stored with provisions. The poor Danes were put ashore on the coast of Africa and left to fend for themselves, while the buccaneers, after burning their old ship so that she might tell no tales, went aboard the new one, which they named the *Bachelors' Delight.* They sailed straight for Cape Horn, and in spite of a bad storm rounded it safely. Arrived in the Pacific, they met the ship *Nicholas* of London, which,

BUCCANEERS ATTACKING A SPANISH SHIP

J. Finnemore, R. I.

A TALE OF THE PACIFIC
Stephen Reid

although supposed to be a trader, was nothing but a pirate in disguise.

The two ships in company made for Juan Fernandez, where poor William the Indian was delighted to see them. Defoe, the author of "Robinson Crusoe", no doubt took a part of his story from the meeting between William and his friends. William had lived alone on the island for three years. His clothes had long ago worn out, and he had made himself some sort of garments out of goats' skins. He had built himself a hut which he lined with goats' skins, and had very cleverly forged a harpoon, a lance, fishhooks, and a knife out of the barrel of his musket. He killed three goats, and of these, cooked with vegetables, he made a feast for the buccaneers who rescued him.

From this island the buccaneers sailed for the Galapagos, a volcanic group lying off the northwest coast of South America. Here they feasted on green turtle, and built storehouses. John Cook, their captain, died, and Edward Davis became their leader. The two ships now parted company, and the *Nicholas,* under Captain Davis, sailed for the East Indies. After a long voyage she arrived at the Ladrones, or Thieves Islands, which were first discovered by Magellan in 1521. Here they quarrelled with the natives and seem to have butchered a number of them. Continuing westward, the *Nicholas* arrived safely in England.

Another famous buccaneer was Captain Swan, who commanded the *Cygnet,* and who was a friend of Davis. It was the *Cygnet* that made one of the longest of the early voyages through the South Seas. Starting in March, 1686, from the American coast, she sailed for the Ladrones. Dampier, who was a member of the crew, was much interested in the very speedy canoes used by the natives. "I have been particular," he says, "in describing these canoes,

because I believe they sail the best of any boat in the world. I tried the swiftness of one of them with our log; we had twelve knots on our reel, and she ran it all out before the half-minute glass was half out. I believe she would run twenty-four miles in the hour. It was very pleasant to see the little boat running so swiftly by the other's side. I was told that one of these proas, being sent express from Guam to Manilla (a distance of about four hundred and eighty leagues), performed the voyage in four days."

WEST AUSTRALIAN NATIVE

Their next port of call was Mindanao in the Philippines, where sixteen of the crew were poisoned by the natives. Since their ship was very foul with weed, they had to find some safe place in which to careen and clean her, so they steered toward Formosa. On the way they found a group of five small islands which exactly suited their purpose. Here the natives were most friendly, and Dampier, who wrote the account of this voyage, says that they were a gentle, clean, and industrious people. They sold provisions to the English, giving a fat hog for an iron hoop, and they made a strong drink called *bashee* out of sugar cane and some black berries, which the buccaneers seem to have greatly enjoyed.

Leaving these islands, the *Cygnet* steered toward the south past the Celebes, and the island of Timor, and reached the northwest coast of Australia, or New Holland, as it was then called. "The inhabitants of this country," says Dampier, "are the most miserable people in the world: the Hottentots compared with them are gentlemen. They have no houses, animals, or poultry; their persons are tall,

straight-bodied, thin, with long limbs; they have great heads, round foreheads, and great brows; their eyelids are always half closed, to keep the flies out of their eyes (for they are so troublesome here that no fanning will keep them from one's face), so that from their infancy they never open their eyes as other people do, and therefore they cannot see far unless they hold up their hands as if they were looking at something over them. They have great bottle noses, full lips, wide mouths; the two fore teeth of the upper jaw are wanting in all of them; neither have they any beard. Their hair is short, black, and curled; and their skins coal black like that of the Negroes in Guinea. Their only food is fish, and they consequently search for them at low water; and they make little weirs, or dams with stones, across little coves of the sea. At one time, our boat being among the islands seeking for game, we espied a drove of these people swimming from one island to another, for they have neither boats, canoes, nor bark logs."

Dampier left the *Cygnet* at the Nicobar Islands, but the *Cygnet* herself went as far as Madagascar. By that time she was so utterly worn out that she sank while at anchor.

Dampier reached England safely, where he published the story of his buccaneering expedition. King William himself seems to have read this story, for he chose Dampier to command the *Roebuck,* a ship belonging to the Royal Navy, for the purpose of exploring in the South Seas. It took Dampier six months to reach Australia, and here for the first time he saw kangaroos. He says that they have very short fore-legs, but go jumping, and are very good meat. The natives pleased him less, for he says of them, "they were the most unpleasant-looking and the worst-featured of any people I ever saw."

On the 1st of January, 1700, he sighted the western end

of New Guinea, and coasted along the shore of that great island. "The natives," he says, "are very black. Their short curled hair is dyed of various colors, as red, white, and yellow. They have broad, round faces with great bottle noses, through which they wear great things as big as a man's thumb and about four inches long. They have also great holes in their ears, wherein they stuff such ornaments as in their noses."

Dampier sailed completely round New Guinea, so for the first time proving that it was a separate island, and not in any way joined to Australia. Having made this important discovery, he started homeward; but off the island of Ascension the *Roebuck,* which was a very old vessel, sprung so bad a leak that her crew were forced to abandon her. But all of them reached the island in safety, and a few weeks later were picked up by a squadron of British warships.

Dampier must have been an excellent seaman, and it is greatly to his credit that he managed to make so long a voyage in so poor a ship. Later he was chosen to command another privateering expedition in the South Seas, and it was during this voyage that he again visited the island of Juan Fernandez, from which he rescued Alexander Selkirk, who is supposed to have been the original of Robinson Crusoe.

CHAPTER XXIV

VOYAGES IN THE PACIFIC

A Dead Half-century—Byron's Voyage round the World—The Rise of James Cook—How a Ploughman's Son became a Captain in the Royal Navy—His Voyage through the Pacific.

BY the beginning of the eighteenth century Portugal had quite dropped out of the running so far as discoveries and discoverers were concerned. Spain too was no longer sending out expeditions. The only two countries which were doing anything in this line were France and England.

And they, as we know, were at that time both busy with wars; indeed, during all the earlier part of the century the greater part of Europe was fighting. There was a certain amount of exploration in Africa, and the Russians, as we have seen, were busy in Northern Asia. Apart from that, those years from 1700 to about 1760 were, from our point of view, very dull ones.

When George III came to the throne there was a change, and in the year 1764 arrangements were made by the English Government for a new voyage of discovery. By this time the greater part of the world was fairly well known and charted, but a belief existed that there were still lands or islands unvisited by any European Powers in the South Atlantic.

Already the French had made a settlement in the Falkland Islands. It was perhaps jealousy of this exploit that caused the English to fit out this new expedition.

Two vessels were made ready, the *Tamar,* a sloop, and a small warship called the *Dolphin.* It is interesting to read that the *Dolphin* was the first ship to have her hull sheathed with copper. Under command of Commodore Byron, the two ships sailed for Rio de Janeiro, and here the men were told for the first time that they were on a voyage of discovery, and that they would receive double pay. At Rio the heat was intense, and the men foolishly sold their warm clothing; but they had hardly been a week at sea before they ran into bitter cold weather. By the time they reached the Straits of Magellan, it was agreed by all on board that the only difference between the middle of summer there and the middle of winter in England lay in the length of the days.

The ships entered the Straits of Magellan, and soon the crews saw a number of natives on the beach. Byron himself went ashore and met the chief. This man was a giant, nearly seven feet in height. Round one eye was a large circle of white, the other was ringed with black, and the rest of his face was painted in stripes of different colors. But ugly as they looked, these Patagonians turned out to be friendly enough, and were very grateful for such small presents as were given to them.

Wood and water were obtained for the ships, then Byron steered back eastward to the Falkland Islands, where he discovered the fine harbor of Port Egmont. He does not seem to have seen anything of the French settlers, and took possession of the islands for the British Government, after which he sailed westward again for the Pacific. Reaching the Straits of Magellan again, he struck the usual dreadful weather, and the two ships were no less than seven weeks beating their way through the cliff-bound narrows. The men were so worn out by the hardships of their seven weeks' struggle that Byron made up his mind to steer for Juan Fernandez and give them a rest. But they missed

the island in a fog, and Byron ordered a course to be laid for Easter Island.

Easter Island is a mere dot of land—the summit of a submerged mountain. It is at no time easy to find, and Byron missed it completely. Matters were getting serious, for scurvy had made its appearance, and many of the men were down with the disease, when at last a small island was discovered. It was covered with tall trees, and friendly natives were seen lighting fires to welcome the voyagers. But when the ships approached, it was seen that the shore was completely surrounded by ragged reefs of coral. There was no way of landing, and nothing to be done except to put to sea again. Next day another little island was seen, which was covered with coconut palms. But here again there was no anchorage, and once more the two unlucky ships were forced to sail away. No wonder that Byron named these tantalizing spots of land the Islands of Disappointment.

Fortunately it was not long before another group of small islands rose above the horizon, and here, to the great joy of every one, an anchorage was found. But the surf was running high over the jagged spikes of coral, and the commander was afraid to risk his boats. One of the midshipmen volunteered to swim through the surf to the shore, which he reached in safety. The natives clearly had never before seen white men. They were deeply interested in his clothes, but otherwise were friendly enough. A way was found for the boats to land, and loads of fresh coconuts were brought off which were the best possible medicine for the scurvy-stricken crew. Byron named these the King George Islands.

After a short stay he sailed westward again, but his crews were still so weak that he had to pass by a number of other islands without exploring them. Early in August

he arrived at Tinian, where he anchored in a good harbor and remained for nine weeks. By that time the men were fit again, and having laid in a good stock of coconuts Byron set sail for England, where he arrived in the following May.

In 1766 another expedition, under command of Captain Wallace, explored a part of the Pacific, especially Otaheite. Otaheite, better known nowadays as Tahiti, is the large island which gives its name to a small group of islands in the very middle of the Pacific. The scenery is magnificent, and although the climate is moist and hot, it is very healthy. All sorts of tropical plants are grown, coconuts, oranges, vanilla, breadfruit, sweet potatoes. The people are a handsome race, very cheery, polite, and friendly, yet the odd thing is that all the earlier explorers complained of their abominable cruelty. The islands were first discovered by the Spaniard de Quiros, and we shall hear more of them when we read of the wonderful voyage of Captain Cook.

Wallace had trouble with the natives, and was forced to fire on them. He also destroyed about fifty of their great war canoes. From Tahiti Wallace sailed to Tinian, then returned home by way of the Cape of Good Hope.

And so we come to the story of one of the greatest of all English explorers—the famous Captain Cook. James Cook was one who rose to fame entirely through his own efforts, for his father was only a farm laborer, with a family of nine children and wages of about ten shillings a week. When James was thirteen years old he was apprenticed to a shopkeeper in a village near Whitby. But the boy hated the shop and loved the sea, so quite on his own account he got work aboard a collier, and for seven years helped to navigate a small ship in the coastwise trade. By that time he had become mate of the vessel, and had learned a deal of navigation in a most difficult and dangerous school.

In the year 1755 young Cook, then about twenty-one years of age, left his ship and volunteered for the Royal Navy. For a time he served aboard the *Eagle,* a sixty-gun ship. He proved himself so smart a sailor that Captain Palliser, who commanded the *Eagle,* gave him an excellent report, so good indeed that the boy—for he was little more—was actually appointed master of the *Mercury* when this ship was sent to join the English fleet in the Gulf of St. Lawrence. This fleet had been sent out to help General Wolfe in his campaign against the French in Canada, but it was necessary, before the fleet moved up the river, to get soundings in the channel. The task was a difficult and dangerous one, and it speaks well for Cook that he was the man chosen for the work.

The soundings had to be carried out in the dead of night, and for several nights on end Cook carried on without being seen. But at last some Indians employed by the French saw the boat with Cook aboard, and tried to surround and cut her off. Cook ordered his men to row for the island of Orleans. At least a dozen Indian canoes chased him, and as the bow of his boat touched the shore the leading Indian canoe drove right into her stern. It was the narrowest escape imaginable, but Cook got safely away, though his boat was lost. He had finished his job, and his survey was so good and accurate that the Admiral himself congratulated him on his excellent work.

So this young man, who was afterward to become so famous an explorer, actually had a good deal to do with the defeat of the French, the taking of Quebec, and the foundation of the great Canadian Dominion. Of course he gained fresh promotion. He was given a bigger ship, and now found time really to study navigation. He was also given the task of surveying the coast of Newfoundland, and the governor of that colony, Sir Hugh Palliser,

made him marine surveyor of Newfoundland and Labrador. It is about this time that a paper which Cook had written on an eclipse of the sun which he had observed in Newfoundland was read before the Royal Society in London, and made his name as well known in England as it already was in North America.

This paper caused the young surveyor to be chosen for a new and important task. In the year 1769 the planet Venus was due to cross the disk of the sun. I will not try to explain why this event is so important to the world of science, but only assure you that the calculations made from a transit are of very great value.[1] So great that on this occasion the Royal Society presented an address to the king asking that a vessel might be equipped to sail to the South Seas and observe the transit from the opposite hemisphere.

Their request was granted, but trouble arose as to who should command the expedition. The person at first chosen was Mr. Dalrymple, a man well known in the world of science. The objection to him was that he had never commanded a ship, and that it was hardly likely that the very rough diamonds who at that time manned ships of the Royal Navy would obey him. At any rate, the Admiralty flatly refused to allow him to take command. The thing was to find some one who was both a scientist and a sailor, and under the circumstances it is no wonder that Lieutenant James Cook was the choice. He was called home and put in command.

The very first thing that Cook did proved that he knew what he was about. He said that he would not take the warship that was offered, but would prefer a collier. He told the authorities that a ship of this kind could carry more stores than a warship, and since she drew less water

[1] See "The Children's Book of the Heavens", page 89.

could be more safely taken close to rocky coasts; also that she would be easier to repair in case of accident than a warship. He was allowed to have his way, and the ship which he picked was the *Endeavour,* of three hundred and sixty tons. No money was spared in fitting her out, and on the 26th of August, 1768, Cook sailed from Plymouth. He

A POLYNESIAN NATIVE IN CEREMONIAL COSTUME

went by Rio de Janeiro, and thence southward round Cape Horn.

Some of the party landed on Tierra del Fuego, where they had an adventure which might have proved serious. The day was very fine and warm, and the party went farther than they had intended. All of a sudden the weather changed, and a bitter wind began to blow. Within half an hour a blinding snowstorm filled the air. It was impossible to get back to the ship, and there was no shelter of any kind. The chief naturalist, Doctor Solander, told

the others that their one chance for life was to keep moving, for if they slept they would all freeze to death. They took his advice, and tramped up and down all that dreary night. Doctor Solander himself was the first to fall a victim to the snow sleep, but his companions dragged him onward, and at daylight luckily reached a small wood of stunted beech trees, where they were able to light a fire.

From Cape Horn, Cook sailed straight to Tahiti, where he put into Port Royal Bay. This was the spot chosen from which to observe the transit. Cook knew that the very first thing to do was to make friends with the natives; so he went ashore, and after a conference with the chief performed the ceremony of changing names with him, thus becoming his brother. After that all went well, and the natives helped to put up tents on shore and to erect the little observatory. Happily the weather turned out perfectly clear, and the transit was successfully observed.

Cook was the first explorer of the Pacific who had the good sense to treat the natives properly and make real friends of them. He tells us that they were good-looking people, and that although their houses were little more than sheds, they were very clever in the manufacture of cloth from the inner bark of a tree. He thought these people much more civilized than most Pacific natives, because their women were not forced to work. He says that, although the women were not allowed to eat with the men, they were yet very well treated. The only fault he found with the people was that they were dreadful thieves.

Cook stayed at Tahiti for three months, and when he left took with him a native named Tupia who wished to accompany him. After leaving Tahiti the *Endeavour* visited the other islands of the Society group, and Cook carefully mapped them. Sailing to the southwest, they reached an island which Tupia called Oheteroa, but there

was no anchorage, and as the natives crowded on the beach, shaking their spears and seeming very hostile, Cook thought it best to pass on. From this unfriendly island, a voyage of six weeks brought the *Endeavour* under the coast of a very large island, which Cook presently realized must be a part of New Zealand, which, as we have seen, was first discovered by Abel Tasman in 1642.

There Cook made up his mind to land, but, just as Tasman had found to be the case more than a hundred years earlier, the natives had no idea of allowing any invaders on their shores. Tupia spoke to them in his native language, and was amazed when he found that these New Zealanders understood him perfectly. But nothing that he could say made them any more friendly. Indeed, they attacked, and in the fight that ensued one of them was killed. There was nothing for it but to resort to force, and Cook made up his mind to capture some of them. He sent the ship's boats after a canoe which he saw entering the bay. There were seven Maoris in the canoe, and they put up such a fight that four were killed before the other three were taken. The three prisoners quite clearly expected to be put to death at once, and when they found that they were being treated with the utmost kindness they were absolutely amazed. They were kept on board the ship for only twenty-four hours, and then allowed to go free.

Although these three natives had promised Tupia to tell their people that the Englishmen meant kindly toward them, the Maoris remained treacherous and dangerous; and in the end Cook was obliged to leave this harbor without getting any of the fruit or fresh food which he so badly needed. He gave the place the name of Poverty Bay, and sailed along the coast toward the north. Touching at other spots, he had better luck with the natives, and was much surprised to find that, in spite of their ferocity, they

were very good farmers, sailors, and fishermen. What made them all the more puzzling was the unpleasant discovery that they were cannibals.

The *Endeavour* struck a patch of very bad weather, and took refuge in the fine harbor now known as Queen Charlotte Sound. Here the people were quite friendly, wood, water, and fish, as well as fruit, were brought aboard in quantities, and Cook took possession of the country in the name of King George.

The great discovery which Cook made was that New Zealand was not one island, but two. He tells us in his journal that the northern island has a better climate than the southern, and that there were at that time more people in it. He tried to find out from the natives whether they had any tradition of the arrival of Tasman in their island, but none of them had ever heard anything of him.

At the end of March, 1770, Captain Cook left New Zealand for Australia, which he reached in twenty days. Starting at the same spot where Tasman had left the coast, he sailed northward along the shores, charting them as he went. Much of the navigation was very dangerous, and in 16° south latitude the *Endeavour* ran upon a coral reef during the night, and was very nearly wrecked. They got her off, but she leaked so badly that the pumps could not keep the water under. Fortunately the shore was only about twenty miles distant, and by dint of throwing overboard the guns and all stores that could be spared, Captain Cook managed to beach the ship in a spot where she could be repaired. When they examined the part of the hull where the ship had struck the reef they found a large piece of coral rock wedged in the ship's timbers. But for this, the *Endeavour* must have sunk the moment she was got off the reef.

The little harbor in which the vessel was beached had

a stream running into it which Cook named Endeavour River. A good many natives came down to the ship, but unlike most natives did not care for the beads and looking-glasses which they were offered. All they wanted was food, and since this could not be spared to them they revenged themselves by setting fire to the long dry grass and nearly burning out the tents which had been erected on shore.

As soon as the ship was ready Cook left the bay and followed the shore toward the north. The sea was one tangle of reefs, and in a heavy gale the *Endeavour* had a second very narrow escape from being wrecked. At the very last moment a narrow channel was seen between two masses of rock, and the vessel was safely steered through it into calm water behind. Still keeping within sight of this dangerous shore, Cook reached the northernmost point of Australia, and took possession of the island continent, giving it the name of New South Wales.

By this time the crew were suffering so much from fatigue and sickness that their commander resolved to sail for home. He made first for Batavia, where the climate was so bad that a number of his people died, among them Mr. Greene the astronomer and Doctor Solander the naturalist. From Batavia Captain Cook took his ship round the Cape of Good Hope, and on the 12th of June following anchored in the Downs. He had been away from England three years all but one month, during which time he had made wonderful discoveries, and had added a whole continent to the British Empire.

CHAPTER XXV

THE SOUTH SEA ISLANDS

The Second Voyage of Captain Cook—He sights the Southern Ice, and sees the Aurora Australis—He makes the Longest Voyage on Record, and returns safely to England.

THIS first voyage of Captain Cook aroused immense interest in England, but there were some men of science who still believed in the existence of the so-called Terra Australis, the great Southern continent which was thought to exist still farther to the south than Australia. The king himself was anxious to find out whether such a continent really existed, and it was decided to fit out a second expedition to search for it. You must remember that in those days nothing whatever was known of the Antarctic, for no ship had sailed much farther south than Cape Horn.

Captain Cook was chosen to lead this new expedition, and was given command of two ships, the *Resolution* of four hundred and sixty-two tons and the *Adventure* of three hundred and sixty tons burden. Great attention was given to fitting out these ships, and every precaution was taken against that horrible scourge, scurvy. A quantity of ground malt was provided from which to make a drink, which was the best medicine then known against scurvy. Dried fruit was packed in cases. There were also bottles of orange and lemon juice, together with vinegar, sugar, molasses, and raisins. The sailors were forbidden to mix

CAPTAIN COOK PRESENTS THE NATIVES WITH SOME SHEEP AND GOATS

Stephen Reid

the fat of salt beef with their flour, and the usual allowance of salt beef and pork was cut down, other food being given instead. Directions were given that the men's quarters should be kept very clean, and the men themselves were ordered to take cold-water baths. I may say here that these precautions were most successful. During the whole of this voyage, one of the longest that has ever been undertaken, not a single life was lost from scurvy, whereas in previous voyages very often three men out of four were down with this dreadful complaint.

Cook sailed from Plymouth in July, 1772, and after reaching the Cape of Good Hope laid a southerly course searching for land said to have been discovered by the Frenchman Bouvet. The ships met with very bad weather, and sighted no land at all. What they did sight were enormous icebergs, some of which were two miles in circumference. By the middle of January, 1773, they saw ice lying all across their course, and as the weather was worse than ever Captain Cook wisely decided to turn back toward the north. In a thick fog the two ships lost one another, and the *Resolution,* Captain Cook's own ship, made straight for Queen Charlotte Sound in New Zealand, which had been appointed as a meeting-place in case the two ships parted company.

It was while sailing in this direction that the people of the *Resolution* first had sight of that beautiful spectacle known as the Aurora Australis, or Southern Lights. While the Aurora Borealis or Northern Lights were quite familiar to sailors, this was the first time on record that Europeans had seen the Southern Lights. At last, after being a hundred and seventeen days at sea without once being in sight of land, New Zealand was sighted on the 25th of March, and reaching Queen Charlotte Sound the *Resolution,* found her consort the *Adventure* awaiting her there.

This time Captain Cook managed to make real friends with the natives. He presented them with some sheep and goats, and his men went ashore and dug a garden in which they planted potatoes and the seeds of English vegetables. After leaving New Zealand, the two vessels voyaged northeast across the Pacific toward the Society Islands, and after a narrow escape from being wrecked on the coral reels of Tahiti anchored on the 24th of August in the same bay which Captain Cook had used on his previous voyage. Owing entirely to the care which Captain Cook had taken with his men, they were all in perfect health, but the crew of the *Adventure,* on the other hand, were suffering dreadfully from scurvy. Her officers, it would seem, were not as keen on health precautions as those in the *Resolution.*

The two ships stayed for some time at Tahiti, and Captain Cook visited the other islands of the group. In order to amuse their visitors the natives gave a sort of theatrical entertainment, which they called the *Heavas.* Every one was most friendly, and the king became very fond of Captain Cook. When they left Tahiti a young native named Omai asked to be allowed to come with them, and sailed in the *Adventure,* while another called Hetehetas was allowed by Captain Cook to become a member of the crew of the *Resolution.* Other islands were explored; then Captain Cook returned toward New Zealand; but the ships ran into fearful weather, during which the *Adventure* was lost sight of a second time, and was not seen again by her consort during the voyage.

Early in November the *Resolution* anchored once more in Queen Charlotte Sound. Fresh provisions were got aboard, then as this was the beginning of summer Captain Cook made up his mind to a second attempt to explore to the south. On the 30th of the month the *Resolution* had reached the seventy-first degree of south latitude, where

the whole sea was found to be frozen. Cook thus made sure that if there was any continent to the south it must be a frozen and useless land.

Turning again, he sailed for Easter Island, which, as you will remember, Captain Byron had hunted for but failed to find. Cook had better success, and reached the island on the 11th of March, 1774. He found it to be a barren place, with no wood and very little water, yet inhabited by natives who talked much the same language as the people of Tahiti. But if there was no wood or water, there were on this island certain objects of immense interest. These were the enormous stone statues which have since been examined by many scientific people, but which are still among the greatest puzzles on Earth's surface. Two small specimens may be seen at the British Museum, but those which remain upon the island are of the most colossal size, and evidently of enormous age. There are over five hundred of them, some as much as seventy feet in height. They are not idols, and no one knows what they represent, why they were carved, or who were the artists who originally cut them out of hard rock. Besides these statues, there are upon Easter Island about one hundred houses built of huge blocks of stone, and in them tablets on which are letters cut in some forgotten tongue. Easter Island is the summit of what was once a gigantic volcano, and seems to be the one remainder of a great continent, the rest of which has long been sunk beneath the Pacific.

Cook next visited the Marquesas Islands, the people of which are, he says, the finest whom he had ever seen. But although they differed from other Pacific peoples, yet Hetehetas was able to talk with them. From the Marquesas the *Resolution* made for her old harbor at Tahiti, where their native friends were delighted to see them, and held a great naval review in their honor. There were no fewer

than a hundred and sixty great war canoes, each from fifty to ninety feet in length, and besides these one hundred and seventy smaller double canoes. This fleet was manned by very nearly eight thousand men.

From Tahiti a course was laid for Huaheine, one of the Society Islands, where the young native Hetehetas said good-by. Captain Cook tells us that he was very sorry indeed to leave his English friends.

Sailing to the west, Cook revisited the Friendly Islands, and spent a couple of months exploring among the maze of islands which fill that part of the Pacific. He visited the New Hebrides, which lie between the Fiji Islands and the Solomon group, and whose people still have a very bad reputation. Turning southwesterly, he passed into the group known as the Loyalty Islands, and discovered an island larger than any they had yet visited since leaving New Zealand. This is now known as New Caledonia. It belongs to the French, and is the place to which they transport all their worst criminals.

The summer of the Southern Hemisphere was now approaching, and Captain Cook made up his mind for a third attempt to explore the Antarctic. On the 10th of November he left New Zealand and bore away for Cape Horn, which after a very rapid voyage he reached on the 17th of December. This was the first time that any ship had run quite across the Southern Pacific.

From Tierra del Fuego he proceeded to the southeast, and ten days later sighted high cliffs covered with snow. These cliffs were cased with solid ice, from which huge masses kept breaking away. The noise was like that of the firing of great guns. This barren and desolate island was named New Georgia. Still keeping an easterly course, another ice-clad country was discovered, to which Cook gave the name of Sandwich Land, after the Earl of Sand-

wich. This land was farther to the south than any yet discovered. Cook, however, could not find out whether it was a group of islands or a part of a Southern continent. But the immense quantity of ice which was seen in all directions led Captain Cook to the conclusion—a perfectly right one, as we now know—that an Antarctic continent did really exist.

The *Resolution* had now sailed right round the globe in a very high southern latitude, and her commander had made certain that the Terra Australis or Southern continent had no useful existence, for whatever lay behind those mighty icebergs must, he knew, be a frozen and desolate land. It was time to return home, and on the 13th of July, 1775, Cook landed at Portsmouth, having been away from home just over three years. His greatest triumph is that throughout all this tremendous voyage, during which he covered more than twenty thousand miles, he had lost but four men, only one of whom had died of illness.

Before ending this chapter I must tell you something of the *Adventure,* which you will remember had been separated from her consort in a great storm in the Pacific. Her commander, Captain Furneaux, made for New Zealand, as he had been ordered to do, but bad weather dogged him all the way, and when at last he reached Queen Charlotte Sound there was nobody there. At first Captain Furneaux was dreadfully afraid that something had happened to the *Resolution,* but when his men went ashore they found carved on a stump of a tree the words, "Look underneath." They dug, and found a corked bottle in which was a letter from Captain Cook telling them that he had left the harbor six days before they had arrived.

Captain Furneaux set to work to get his ship ready for sea, and sent one of his midshipmen, Mr. Rowe, ashore in a cutter with nine men to gather a stock of scurvy grass

and other greenstuff. Darkness fell, but the boat did not return, so early next morning the second lieutenant, Mr. Burney, went in search of her in the launch, with a crew of ten men well armed.

Reaching the beach at Grass Cove, native baskets were seen lying on the beach, and these were found to be full of roasted flesh. Searching farther, some shoes were found, then a human hand. This was recognized at once as having belonged to Thomas Hill, for there was a tattoo mark on it which could not be mistaken. It was now plain what had happened. The treacherous natives had fallen upon the crew of the cutter and killed them all. This horrible business, and the loss of so many good men, decided Captain Furneaux to return home, and he anchored at Spithead on the 14th of July, 1774.

CHAPTER XXVI

THE TRAGIC END OF CAPTAIN COOK

Cook's Third Voyage—A New Attempt to discover the Northwest Passage—The Murder by Savages of the Great Sailor.

COOK'S second voyage had made it plain that the great Southern continent, if it existed at all, lay too far south to be of any value whatever. The one great problem that remained to be solved was whether it was possible to find a short route by the north to China and Japan, and in the year 1745 an Act of Parliament was passed offering a reward of £10,000 to a ship belonging to any of his Majesty's subjects who should find such a passage.

Captain Cook had shown himself to be so good a navigator that he was chosen by the British Government to make a new effort to find a northwest passage. So many attempts had been made to find a way round the north of the American continent from the Atlantic Ocean that it was decided to send the new expedition into the Pacific, and to try to find a way from the Pacific to the Atlantic instead of from the Atlantic to the Pacific.

In July, 1776, Captain Cook left Plymouth Sound with two vessels, the *Resolution* and *Discovery*. He sailed by way of the Cape of Good Hope, and running very far to the south sighted Kerguelen Land, which had been dis-

covered by a French sea captain. Cook found that this land, instead of being a continent, was only a large island. It was a most desolate spot, simply bare rocks without a shrub or a tree. Its only inhabitants were penguins and seals. From this island the two ships made for Australia, and anchored in Adventure Bay on the southern coast of Tasmania. Cook did not know that Tasmania was an island, but was still under the impression that it was part of Australia. Here they saw some of the natives, who were utter savages. They did not even know how to build a house, let alone a canoe, and although the sea teemed with fish they were quite unable to catch any. These Tasmanian natives have now died out completely—there is not one of them left.

From Tasmania the two ships sailed for New Zealand, where Captain Cook found the natives very shy and terrified. They thought, of course, that the English ships had come to take vengeance on them for the murder of Captain Furneaux's men during the previous voyage. But Captain Cook had no such intention, and by degrees managed to make friends again. He found that the chickens which he had left had increased in numbers, and that the vegetables, especially the potatoes, had grown wonderfully. He left the natives some goats and pigs, and on the 25th of February, 1777, started on a northeasterly course across the Pacific.

The ships called at a number of islands. At one, named Wateso, a boatload of people went ashore, and the treacherous natives planned to murder them. Luckily for the Englishmen, they had with them a Tahitian native named Omai who had been with Captain Furneaux in the *Adventure*. This man suspected the plot, and told the natives that the English ships had guns so powerful that, if they fired them, they could destroy the whole island and every-

STONE STATUES AT EASTER ISLAND

From "The Mystery of Easter Island", by Mrs. Scoresby Routledge

THE DEATH OF CAPTAIN COOK
Henry Evison

body in it. The natives did not believe him, but Omai had all his wits about him. He happened to have a few cartridges in his pocket, and pulling these out flung them into the cooking fire. There was a loud report, the embers flew all over the place, and the treacherous natives got such a scare that they gave up their plan of ambushing the English.

Omai belonged to Tahiti, and to his great amazement, here on this island, many hundreds of miles from Tahiti, he found three of his countrymen. These turned out to be the survivors of a canoe load of twenty people who had sailed from Tahiti to cross over to a neighboring island. Caught in a violent storm, they had driven before it for days, until all but four died of hunger and thirst. These four, almost dead, had been picked up by a canoe from Wateso and brought ashore. This is interesting, because it goes to show the way in which all these thousands of Pacific Islands have been populated perhaps from one or two common stocks.

At the Friendly Islands Cook left a quantity of live stock, including horses, cows, sheep, and goats; and from that group went on to Tahiti. Here again he left some live stock as a present to the king. At Tahiti Captain Cook and Captain Clerke, who commanded the *Discovery,* took two horses ashore, saddled them, and went for a ride. The sensation they caused was simply terrific. Crowds gathered from every part of the island, and the people were more impressed by this sight than by the English ships or guns or any other of the wonders from the West which they had yet seen.

Omai was left behind in the island of Huaheine, where a nice wooden house was built for him. In this were placed pieces of English furniture, and many other articles which Omai had brought from England. The house became a

sort of museum, which was visited by people from all parts of the islands.

Continuing his course toward Alaska, on the 18th of January, in 21° north latitude, a very large island was sighted, and beyond it two others. These were the islands which were named by Captain Cook the Sandwich Islands.

In all there are twelve of these, which are together about the size of Wales. Hawaii is the largest, and possesses two enormous volcanoes, each over thirteen thousand feet in height. Kilauea is the largest active volcano in the world, with a crater nine miles round, inside which is a huge lake of fire, where the molten lava rises and falls like waves of the sea. These islands have perhaps the most delightful climate in the world, and now belong to the United States.

Captain Cook found the natives quite friendly and ready to trade. He bought from them pigs, fowls, and all kinds of delicious fruit, and in exchange gave them some of his live stock. He was very pleased with these people, yet horrified to discover that to some extent they were cannibals.

Leaving these islands, the expedition reached the coast of New Albion—that is, British North America—on the 7th of March. The natives were clad in furs, and proved quite polite. They had iron weapons; and the English were astonished when one of their chiefs showed them two silver spoons. Captain Cook was not aware that part of this coast had been surveyed by two Spanish ships some years earlier. The bay in which he lay he named King George's Sound. After leaving this harbor strong winds drove his ship off the shore, and it was some days before he again sighted land. This was in latitude 59° north, the southern part of what is now Alaska. Quantities of furs were bought from the natives, who in dress and language were curiously like to the people of Hudson Bay on the opposite side of the continent.

Still coasting to the northwest, the ships doubled the end of the great territory of Alaska and entered Behring Strait, and crossed the strait to the western shores, where Captain Cook found that the charts which he had been given were all wrong. He corrected these, and pushed forward into the Arctic. By the middle of August the ships were in 70° north latitude—that is, almost on a level with the northernmost point of Alaska. But here the sea was covered with masses of ice, so thick that any advance was out of the question. Hundreds of walruses were seen, and although their flesh was coarse the sailors were delighted to get some fresh meat.

Since it was impossible to go farther to the north, Captain Cook made up his mind to return to the Sandwich Islands for the winter, and have another try for his northerly passage in the next year. It was on the 26th of November that the ships reached for the second time the Sandwich Islands, and seven weeks were spent in exploring and mapping the group. Captain Cook made his headquarters in Karakakooa Bay, in the island of Owhyee. The natives came in hundreds, and their king showed himself very friendly. The only trouble was that the people were arrant thieves; all sorts of small articles were stolen, and Captain Cook found it difficult to keep the peace between his men and these thievish scamps.

On the 4th of September Captain Cook, with both his ships, sailed out of the bay to complete his survey of the islands, but they ran into a heavy gale, during which the *Resolution* was so damaged that it was decided to return to their anchorage for repairs. While this work went on the natives took to stealing worse than ever. Those who were caught were punished, and this gave rise to bad blood. Presently matters took an ugly turn. A native had stolen the tongs from the smith's forge, and a boat was sent ashore

to recover them. The crew were mobbed by a number of natives and very roughly handled. There was worse to come. During the night the large cutter belonging to the *Discovery,* which was lying at anchor near the ship, was taken away. This was too much for even the kindly Captain Cook, and he decided to take stern measures. He made up his mind to capture the king and hold him prisoner so long as the ships remained in the bay.

In his largest boat, with a well-armed crew, he himself went ashore. When he stepped out on the beach the natives seemed quite respectful, and he and his men marched to the king's house, and after some trouble persuaded him to come aboard. All went well until they came to the water's edge, when the old king flopped himself down on the beach and refused to go any farther. By this time an enormous crowd had collected, and the natives were plainly in an ugly temper. Even so all might have gone well but for an unlucky accident. An English boat, which had been stationed at the west side of the bay, seeing a large canoe put off, fired a shot to stop it, and the bullet, badly aimed, accidentally killed the chief in charge of the canoe.

This stirred the crowd at the landing place to fury. They gathered large stones and brandished their knives. One of his officers begged Captain Cook to allow him to fire at them, but the Captain would not permit the marines to fire, for he still hoped to finish the business without bloodshed. Suddenly the natives rushed, and the marines were forced to let fly. It was too late. The marines, you must remember, were armed with the old-fashioned muzzle-loading muskets, which took a long time to reload. Before fresh cartridges could be rammed down the marines were swept into the water, where four of them were instantly killed.

The boat lay just offshore, so crowded that her men had

hardly room to move. Captain Cook was still on shore. They called to him to come down to the boat, and he started toward it, holding his left hand against the back of his head to guard it from the stones which were flying in every direction.

Suddenly a native sprang upon him from behind and struck him on the head with a war club. The blow stunned Captain Cook, and he fell, dropping his musket. Before he could recover his feet another native stabbed him in the back of the neck with a dagger. Again he tried to rise, but fell into the water. The natives swarmed upon him, and although he struggled bravely and got his head up, another blow from one of the great war clubs finished him. The savages hauled his lifeless body out of the water and cut it to pieces.

The lieutenant who commanded the launch from which the first unlucky shot had been fired had made no attempt to go to his captain's rescue. What is even more strange, although the fire from Captain Cook's boat did at last succeed in driving back the crowd of savages, this officer rowed back to his ship without even attempting to recover the body of his commander. It was Captain Clerke himself who, with the greatest difficulty, managed to get the mutilated remains aboard and commit them to the deep.

So sadly ended the career of one of the finest seamen and navigators that England ever produced. Certainly no Englishman before his time had ever done so much for the science of geography. He had mapped two thousand miles of the coast of Australia, he had sailed right round New Zealand, he had discovered New Caledonia and Norfolk Island, and he had proved once for all that Terra Australis, the habitable Southern continent, did not exist. Speaking of Cook's survey of the shores of New Zealand, the well-

known French explorer Crozet says, "Its exactness and minuteness of detail astonished me beyond expression."

But perhaps his greatest claim to fame is his wonderful success in keeping his men in good health during long sea voyages. Up to his time it had always been difficult to find men willing to volunteer for a long voyage, for in signing on they had felt that they were very likely signing their own death warrant. Cook put an end to all this by proving that no matter what the climate or the season of the year, a long voyage did not mean harm to the health of the sailors.

After the tragedy of Captain Cook's death Captain Clerke made a fresh attempt to find a passage through the Arctic, and in the following summer once more sailed through Behring Strait. But a little south of the point which they had reached in the previous year the ships again met with solid ice. Since it was clear that there was no passage in this direction, Captain Clerke decided to return home. He, poor man, died shortly after, but the ships arrived safe in the mouth of the Thames after an absence of four years and three months.

The most important result of this voyage was the discovery that sea otter and sealskins, both immensely valuable, could be obtained in quantities on the northwest coast of America. The sailors themselves made over two thousand pounds by selling the skins which they had brought home.

CHAPTER XXVII

THE ELUSIVE NORTHWEST PASSAGE

Fresh attempts to find the Northwest Passage—The Journeys of Ross and Parry—Parry wins the £10,000 Prize offered by the English Government—He spends Two Successive Winters in the Ice and makes Valuable Discoveries.

FROM a business point of view the most valuable result of Captain Cook's last voyage, as we have seen, was the beginning of the trade in sea otter and sealskins on the coasts of British Columbia and Alaska. Americans, English, and Spaniards all sent ships to explore this little-known coast, and a serious quarrel resulted between the Spanish and the English. A Spanish warship sent to Nootka Sound from California seized a British trading-ship. The British Government at once fitted out a fleet, and the Spaniards hurriedly restored the seized property and gave back Nootka Sound to its original owners.

The British Government then sent out a surveying party, under Captain Vancouver. Captain Vancouver was a worthy successor to Captain Cook, and he carefully surveyed more than nine thousand miles of coast of Northwest America that was hitherto unknown. Most of the work was done in open boats, and in the year 1798 the plucky explorer, whose health had been ruined by hard work and exposure, fell ill and died.

All through these last years of the eighteenth century

both the Americans and the English were busy exploring the interior of the North American continent. The United States purchased the great territory of Louisiana from the Spaniards, and famous explorers such as Daniel Boone, Captain Lewis, and Lieutenant William Clarke were busy mapping the new territory. At the same time Hearne, Joseph Frobisher and Alexander Mackenzie were traveling through British North America. It was Mackenzie who gave his name to the Mackenzie, which, next to the Yukon, is the largest river flowing through North America into the Arctic Ocean.

The rapidly increasing settlement of North America caused the British Government to take fresh interest in the question of the Northwest Passage, but for some years the great Napoleonic wars put a stop to all such enterprises. It was not until 1818 that money was forthcoming to pay for a new expedition. Two ships were fitted out, the *Isabella* and the *Alexander,* and placed under the command of Captain Ross and Lieutenant Parry, names which have become famous in the history of Arctic exploration. Their orders were to sail into Baffin Bay, that great expanse of water which lies between Greenland and Baffin Land, and to endeavor to force their way westward toward Behring Strait.

Ross reached latitude 75° 54′ without much trouble. By this time the ships had passed that part of Greenland which was known to be inhabited by Eskimos, but suddenly, to their great surprise, a small party of natives were seen crossing the ice toward the ships. These people, who are the ugliest of all the Eskimos, had never before seen white men, and at first could hardly be persuaded to touch the English. The sight of the ships astonished them beyond measure. But the English were equally astonished when they found that these people, whom Ross named the Arctic

Highlanders, had spears and knives made of iron. It has since been discovered that they did not mine this metal, but obtained it from a great mass of meteoric iron, a part of some dead planet which fell long ago on the barren coast of Greenland. Years later the American explorer Peary dug this huge meteorite from its icy bed and brought it back to the United States.

Pushing on through heavy ice, the expedition got a fresh shock when they saw cliffs covered with snow of a deep red color. It has since been learned that this snow is reddened by a kind of lichen. On the 29th of August, on the western side of Baffin Bay, a great inlet was found, which was free from ice and where the water was very deep. This was Lancaster Sound, so named by Baffin. Into this they had sailed some thirty miles when Ross made a signal to return. His excuse was that he had seen land stretching across the inlet, but this must have been pure imagination on his part, for as we now know there is an open channel between the north of Baffin Land and the great island known as North Devon.

After this Ross took his ships back to England, but his failure to find the hoped-for passage did not discourage those who believed in it, and in the following May a fresh expedition went out, this time commanded by Lieutenant Parry. His ships were the *Hecla* and the *Griper*. As before, Baffin Bay was reached without trouble, but the ice was much heavier than in the previous year, and at first it seemed impossible to find a way through. But Parry was not the sort to give up, and he decided to make a bold effort to penetrate the ice. Success rewarded his efforts, and after seven days of great difficulty and danger he found himself on the far side of the barrier. He was rewarded by discovering a deep sea clear of ice. Whales were everywhere, no fewer than eighty being seen in one day. With

a fresh easterly breeze the ships ran to the westward. Still no ice; and when they had reached 83° west longitude it really seemed that they had at last found the long-desired passage. Now the compass began to play curious tricks. The needle actually lost power of motion. The fact was that they were very close to the so-called magnetic pole, which is of course at a very considerable distance from the North Pole.

Disappointment was, however, in store for the bold explorers. A barrier of ice was found which filled the whole inlet, and they were forced to return. They tried another channel, but the wind was light, so that travel was slow. Along this inlet, which they named the Wellington Channel, they sailed until they reached 92¼° west longitude. At this point the water became more shallow, the ice thicker, while heavy fog made navigation very difficult. Yet Parry still struggled onward until the ships reached Bathurst Island, which is due north of Prince of Wales Land. They landed, and found that even this remote Arctic country was inhabited by Eskimos and by reindeer and musk oxen.

Although it was growing late in the year, Parry still pushed on, and on the 4th of September the ship reached 110° west longitude, and so became entitled to the reward of five thousand pounds offered by the English Parliament for the first vessel past the meridian. Winter was now setting in, the ice was getting thicker every day, and Parry decided upon going to winter quarters. He found a bay suitable for this purpose in the shore of Melville Island, which lies on the north of Melville Sound. But this bay was already filled with ice, and in order to get the ships into shelter it was necessary to cut a canal through the ice with saws. The length of this cut was more than two miles. and the ice was seven inches thick, so it is much to the

credit of the English crews that they finished this work in three days. As soon as the ships were safe in harbor, the heavy stores were taken out and placed on shore. The ships' decks were roofed in with thick canvas, then snow was piled against the sides of the vessels, while stoves were lighted to keep the insides of the vessels warm.

By this time the temperature had dropped below zero, and in spite of all precautions ice formed on the inner skins of the vessels in a solid plate. Parry knew that his men must have exercise and amusement. At first he took them ashore to hunt, and they killed quantities of grouse and reindeer. But these soon left, and by the end of October there was no wild life except foxes and wolves; so Parry organized sports, and afterward he and his officers got up a play of which the first performance took place on the 6th of November. This was the day on which the sun sank below the southern horizon, not to appear again for three weary months. A newspaper called *The North Georgia Gazette* was published, and this and various dramatic performances kept the men amused.

The cold became intense, and in January there were usually from sixty to seventy degrees of frost. Several men went down with scurvy, but Parry was equal to the occasion. He placed boxes of earth in his cabin in which he raised crops of mustard and cress, and these fresh leaves were found to be a finer medicine than lime juice or any other preparation for the cure of this disease.

On the 7th of February the sun showed for a minute or two at midday, but the cold became more intense than ever. On the 15th of February the spirit thermometer showed a temperature of 55° below zero—that is, eighty-seven degrees of frost. On the 24th of the month the observatory which had been built on shore took fire, and the men ran to extinguish the flames. On this day the

thermometer was 44° below zero, and nearly every one of the helpers got frostbitten. Noses and cheeks turned quite white, and the doctor had to run from one man to another, rubbing the affected part with snow in order to restore circulation. One man in his hurry to save the dipping needle ran out without his gloves, and his hands became so completely frozen that when plunged into a basin of cold water the water was immediately coated with a cake of ice. In this case the poor fellow lost several of his fingers, which had to be amputated.

Early in March it grew warmer, and the ice which had formed on the inside of the ship was cut away. "It will scarcely be credited," says Captain Parry, "that we this day, 8th of March, removed about one hundred buckets full of ice, each containing five to six gallons, being the accumulation which had taken place in less than four weeks; and this immense quantity was the produce of the men's breath and of the steam of their victuals during meals."

But it was not until May that the first ptarmigan was seen, and not until the 24th of that month that the first shower of rain fell. Captain Parry wrote, "To see water in a fluid state at all, much less to see it fall from the heavens, was such a curiosity that I believe every person on board hastened on deck to witness the phenomenon."

Early in June Captain Parry went ashore to explore Melville Island, and spent fifteen days in this task. When he returned the dreary shores of Winter Harbor were covered with green grass and with the lovely purple flowers of a kind of saxifrage. But although the thaw was so complete, it was not until the 1st of August that the ships were able to escape from Winter Harbor.

Once more Parry sailed toward the west, but when the ships reached the western point of Melville Island the ice

became so thick that it was utterly impossible to make a way through it, and Parry, much against his will, was forced to return. The two ships arrived in the Thames in the middle of November. Like Captain Cook, Parry had taken great care of his crews. He had lost but one man from illness, and did not bring home a single invalid.

On the whole, this voyage had been a great success. For although Parry had not managed to force his way through to the Pacific Ocean, he had yet made it fairly clear that a sea passage did exist. At any rate, the Government decided on a third expedition.

Of Parry's two ships, the *Hecla* had been found the better, so she was fitted out again, and with her a similar ship called the *Fury*. Captain Parry was ordered to begin his examination of the coast after he had reached some point which he was certain was part of the American continent, then to keep along the coast, and explore each inlet as he came to it. The two ships left the Thames in May, 1821, and made their way, not to Baffin Bay, but through Hudson Straits. Here the ice was very thick, and curiously enough was in many places covered with sand and great boulders. So thick was it that it was not until the 2nd of August that the ships reached the mouth of the channel between Southampton Island and the mainland.

Now I want you, before reading this description of Parry's third voyage, to look at a map of Hudson Bay. You will see that there is an opening out of the Bay toward the north between the Melville Peninsula and Baffin Land. Of this opening Parry at the time knew nothing. He believed it likely that Frozen Strait, which had been discovered in 1742 by Captain Middleton, might be the opening he was looking for, and he resolved to force his way through it. Although Frozen Strait is actually south of the Arctic Circle, it was full of ice, and it took nineteen days to reach

the inner end of it, where it joins the wider strait known as Rowes Welcome. Here the fog was so thick that they could see nothing, and they found themselves in Repulse Bay, a large landlocked opening at the head of Frozen Strait.

The whole of September was spent in surveying the coast, and by that time frost had set in and the young ice was beginning to form. So Parry decided to find winter quarters, which he did at Winter Island, off the southern coast of the Melville Peninsula. Since the warmth of the ships was better provided for than during the previous expedition, the men were much more comfortable, and as before plays were given and concerts.

To Parry's surprise he found an Eskimo village on Winter Island. The village consisted of snow huts warmed by lamps in which blubber was burnt. Light was admitted into each hut by a circular window of ice neatly fitted into the roof. These Eskimos were good people, very honest and kindly. The curious point about them was that although few could count to more than five, they were yet able to draw maps of the surrounding country, maps which Parry afterward found to be wonderfully accurate.

Spring was very slow in coming, and it was not until the 2nd of July that the vessels were able to escape from the ice. Parry made his way northward up the Fox Channel, but the current brought down with it such masses of drift ice that his vessels were in constant danger. Over and over again they narrowly escaped being crushed, but at last they reached the mouth of the strait between the mainland and Baffin Land, which, according to the Eskimo map, led through to the western sea. The crews were thrilled with excitement, and all were full of hope that they had at last discovered the longed-for channel. Imagine their disappointment when they discovered a monstrous

barrier of ice lying right across the western mouth of the strait.

Even now Parry would not give up, and he spent no less than sixty-five days in a desperate struggle to force a passage. It was useless, and as the season was too far advanced for a return home, Parry was forced to go into winter quarters for a second time.

The winter was a very severe one, and when summer came the ice remained as thick as ever. The 1st of August, 1823, arrived, and the ships were still shut up. So Parry decided that the only thing to do was to saw his way out. After ten days of very hard work the two vessels were at last freed. Parry, it seems, wished to continue his explorations, but scurvy had made its appearance among his men, and the commander, much against his will, had to decide to return home. With both his ships he got safely back in the middle of October, having been away two years and three months. During all that time he had lost only five men out of a hundred and eighteen.

CHAPTER XXVIII

CAPTAIN JOHN FRANKLIN

Journeys of Captain Franklin—His Expedition to the Mouth of the Coppermine River—Starving to Death—Midshipman Back to the Rescue—Franklin's Second Expedition—Mapping the Coast of Arctic America.

WHILE Parry was busy trying to find a passage from Baffin Bay to the Pacific another English expedition was making some important discoveries on the mainland of North America. This was under command of that great explorer, Captain afterward Sir John Franklin.

John Franklin was a native of Lincolnshire, and was born at Spilsby in the year 1786. He was the youngest son of a family of twelve children. His father had intended him for the Church, but young Franklin determined to be a sailor, and in the year 1800, when fourteen years of age became a midshipman aboard the *Polyphemus*.

He saw a great deal of hard service. He was present at the battle of Copenhagen and at that of Trafalgar. He also made a voyage to Australia, where he helped his relative, the well-known Captain Flinders, to map the coast of the island continent. In the year 1818 Franklin took part in an Arctic expedition under Captain Buchan. Although this expedition had no particular success, it gave proof of Franklin's good seamanship and calm courage, and showed

THE FIRST PTARMIGAN

From "My Life with the Eskimo", by Vilhjalmur Stefansson (New York: The Macmillan Company)

By permission of the American Museum of Natural History

THREE-ROOMED ESKIMO DWELLING, CORONATION GULF

From "My Life with the Eskimo", by Vilhjalmur Stefansson (New York: The Macmillan Company)

him to be exactly the sort of man who might safely be chosen to command an Arctic expedition.

The Coppermine River is a swift and dangerous stream which was originally discovered by the explorer Hearne in 1771. It runs out of the Copper Mountains, and reaches the Arctic Ocean at Coronation Gulf, and the British Government was anxious to map the Arctic shore to the eastward. Captain Franklin started from York Factory on the shore of Hudson Bay on the 9th of September, 1819. He had with him Doctor Richardson, a naturalist, two midshipmen, named Hood and Back, and two English seamen. Traveling at a great pace, the party had covered no less than six hundred and ninety miles by the 22nd of October, when they reached the Hudson Bay Company's post known as Cumberland House. It was now very late in the season, yet Franklin determined to push on as far as Lake Athabasca in order to be ready for an early start in the next summer. Accompanied by Mr. Back, he traveled nearly nine hundred miles in the very depth of winter, and safely reached Fort Chepeweyan.

It was not until July, 1820, that his other companions joined him, but by this time Franklin had everything ready, and on the 18th of the month the party started. The journey turned out much more difficult than had been expected. The rivers were full of rapids, round which the canoes had to be portaged—that is, carried—and the delays were so great that food ran short. By the 20th of August ice was beginning to form on the pools, and the wild geese were flying southward. The Canadian hunters who were with Franklin declared that they could go no farther, so Franklin decided to make winter quarters on the banks of a stream named Winter River. They called this place Fort Enterprise, and here Franklin built a house and started to lay in a stock of provisions. Numbers of

reindeer were killed, and a quantity of salmon caught and frozen.

For some time all went well, but such numbers of Indians crowded round the fort, living on the charity of the whites, that food ran short, and Mr. Back had to be sent to Chepeweyan to procure fresh ammunition and provisions. In spite of the terrible cold, which was at times as much as eighty-nine degrees of frost, Back performed the long and difficult journey in safety, and returned with fresh stores.

At Fort Enterprise itself the cold was equally intense; the temperature was actually lower than Parry had found it at Melville Island, more than five hundred miles farther north. The trees froze to their very cores, and the wood became so hard as to break the axes used for chopping it.

Franklin's party saw a good deal of a tribe of Copper Indians. Their chief had a daughter who was the beauty of the countryside. Mr. Hood drew a picture of her, much to the annoyance of the girl's mother, who was afraid that the great chief in England would see the picture and send for the girl to be his wife.

It was not until the 14th of June, 1821, that the ice broke up enough to allow canoes to go down the river. The journey was difficult, for there were many rapids and falls. Luckily there was plenty of game, so the party fared well. One evening Doctor Richardson, the naturalist, had climbed to the top of a cliff above the river and was sitting there when he saw nine great white wolves creeping toward him in crescent formation. These wolves have a habit of hemming in herds of deer and driving them over the cliffs, so that they may feast on their mangled remains, and Doctor Richardson was much amused to realize that the wolves were trying the same trick on him. He stood up and walked straight toward them, at which they sheered off and allowed him to pass.

On the 18th of July the party arrived at the mouth of the Coppermine, and here the Indians who had come with them refused to go any farther. The fact is that they were mortally afraid of the Eskimos, between whom and themselves there always has been and still is war. Franklin had trouble with his Canadian hunters, who knew nothing of the sea, and were badly frightened at the idea of his embarking upon it. And really there was some excuse for their fear, for the only boats which Franklin had were a couple of birch-bark canoes, while the stock of provisions was very small. It was John Hepburn, an English seaman, who did more than the commander himself to encourage the Canadians.

The sea was quite open, and Franklin turned westward toward a big bay, which he named Coronation Gulf. But very soon the stock of provisions was finished, so instead of returning to the Coppermine Franklin decided to make his way up another stream called Hood's River, and then to strike across country back to Fort Enterprise. Trouble began at once. They had not got far up Hood's River before a huge waterfall forced them to leave their canoes and to start afoot across a terribly barren country. After five days' marching snow came on, and though it was still early in the season fell two feet deep. They could find hardly any game, and were forced to live on *trêpe de roche,* a kind of lichen. Soon they all became very weak, but they struggled on, until at last, on the 26th of September, they reached the Coppermine. But having no canoes they were without the means of crossing it, and there was no timber with which to make a raft. At last they managed to build a kind of basket canoe, in which they crossed one by one.

The crossing had taken no less than eight days, and the weather now turned worse than ever. They were still forty miles from Fort Enterprise, and not a morsel of food re-

mained. The midshipman, Back, with three Canadians pushed on in hope of finding the Indian hunters near Fort Enterprise. Three days later Captain Franklin and seven men set out, leaving Doctor Richardson and Mr. Hood to look after the men who were unable to march. It took Franklin seven days to cover that terrible forty miles, and by the time that he and his men reached the fort none of them had tasted food for five whole days. Imagine their horror at finding the fort completely deserted and without a morsel of food in it. Too weak to go in search of Mr. Back, the party spent eighteen days in the fort, living on a thin soup made out of the bones and skins of deer; then on the 29th of October Doctor Richardson and John Hepburn staggered in, mere skeletons.

They had a dreadful tale to tell. One of the Indians, Michel by name, had murdered Mr. Hood. In self-defence Doctor Richardson had been compelled to shoot Michel. Then he and Hepburn had managed to reach the fort, living meantime on lichen and on old skins boiled down. The rest were dead.

There was still no sign of help, and during the next week two of the Indians died of starvation, while Franklin and the others had become almost too weak to move. They had given up hope when, on the 7th of November, hunters sent by Mr. Back arrived with a plentiful supply of meat.

And so at last Captain Franklin and the survivors of his party came to safety. They had traveled no less than five thousand five hundred miles, and made valuable discoveries.

His sufferings during this first journey did not discourage Captain Franklin from making another, and in 1825, he, together with Doctor Richardson, Mr. Back, and Mr. Kendal, started from the Methye River to explore that giant stream the Mackenzie. Once they reached the Mac-

kenzie the travelers found much easier going than on their previous journey. Below Fort Simpson the river opened out to two miles in breadth. In places they saw seams of coal in the banks. There were traces, too, of bitumen. Indeed, as is now known, there are extensive deposits of oil and of natural gas in that country. As they neared the sea the river broke up into a great number of channels and it took two days' voyaging through these channels

ESKIMO MAN AND WOMAN
After a drawing by John White, about 1585

before they got sight of the sea. So great was the flow of fresh water that Franklin had to travel almost out of sight of land before he found salt water and could be sure that he had reached the sea.

Having explored the mouth of the great river the party returned upstream to winter quarters on Great Bear Lake. Here they built several houses on a dry bank some height above the lake. This place was called Fort Franklin, and that winter had a population of nearly fifty.

Captain Franklin's object was to survey the coast westward from the mouth of the Mackenzie, and for this pur-

pose he and a well-provisioned party started on the 22nd of June following. On the 4th of July they reached the mouth of the river, where they divided up, one party commanded by Doctor Richardson going to the east, while the other under Captain Franklin sailed to the west. Each party had two boats and provisions for eighty days. The faithful Mr. Back commanded Franklin's second boat.

Franklin's party soon found that the coast was thickly populated with Eskimos. Scores of canoes came out. Most of the natives were willing to trade, but some did their best to steal. Unluckily Mr. Back's boat grounded on a sand bank. Eskimo canoes surrounded it, and the natives tried to pillage it. Back had the good sense to refuse to allow his men to shoot, and although the Eskimos flourished their knives, they did not use them. The tide rose, the boat floated, and all ended well.

With a fair wind, the boats traveled rapidly along the coast in a northwesterly direction. They had not gone far, however, before they were stopped by an immense sheet of ice running out seaward as far as eye could see. Franklin had to wait until this ice sheet broke up before resuming his voyage. The water was shallow, fogs were thick, and the sea was full of broken ice, so the journey became very difficult. Yet they managed to reach the eastern edge of Alaska, which was then Russian territory, where they landed and hoisted the Union Jack.

It was now the 16th of August, and fogs were thicker than ever; also it froze every night. Captain Franklin therefore made up his mind that there was nothing for it but to return to Fort Franklin, and this they reached on the 21st of September, after a journey in which they had covered in all more than two thousand miles.

Doctor Richardson's party was more successful. He traveled past the mouth of the Coppermine River and

through the narrow channel between the mainland and Woolston Land. He explored in all nine hundred miles of coast, and got back to Fort Franklin by the beginning of September.

CHAPTER XXIX

ADVENTURES IN AFRICA

Travels of James Bruce—Mungo Park explores the Niger—His Sad End.

HAVING now spent a good deal of time in the colder regions of the earth, I am going to take you back into the Tropics, and tell you something about one of the most famous of English explorers of Africa. James Bruce, known as the "Abyssinian", belonged to the well-known Scottish family of that name. Born in Stirlingshire in 1730, he was educated at Harrow and Edinburgh, and in the year 1763 was appointed Consul-General at Algiers. Unlike most of our travelers, Bruce was well off, and having decided to travel in the unknown parts of Africa he set to work to prepare himself for this task.

First, he spent two years learning Oriental languages and something of medicine. Then giving up his consulship he went to Aleppo, where he stayed some time studying medicine. He visited Rhodes, Crete, Cyprus, and Egypt, and from Egypt made up his mind to travel into Abyssinia. In those days Egypt was no place for a Christian, but Bruce made friends with the secretary of the Pasha, a Copt named Risk, and Risk was very good to him.

It was on the 12th of December, 1768, that Bruce started

up the Nile. At Dendera he saw his first crocodile; these reptiles, he noticed, did not attack the cattle that were driven into the river to drink. On the following 16th of February Bruce left the Nile, and traveled with a caravan across the eastern desert. He passed mountains of jasper, granite, and marble, and reached Jedda in safety.

It was from Jedda that he started inland for Abyssinia. He crossed three ranges of mountains where herds of beautiful white cattle fed. He says they had white horns and long silky hair. He also saw immense herds of antelopes. Passing Dixan and Adowa, he made his way through great fields of cotton to a town called Axum, which once had been the capital of Abyssinia. It was now, however, nothing but ruins.

From Axum he traveled to Gonda, the modern capital. Here the country was very rich, but the soil swarmed with enormous ants, while hordes of mice and rats devoured the crops. The king was away, but Bruce was received by a nobleman named Ayto Aylo, who was amazed to find that the Englishman spoke his language perfectly. Bruce was called in to attend the children of the queen, who were suffering from smallpox, and principally by the use of fresh air and soap and water he cured them completely. His reward was rather an embarrassing one, for he was at once appointed governor of a province. However, he got out of the difficulty by transferring the appointment to a native friend.

The queen-mother was very anxious that Bruce should stay in Gonda, but Bruce's great idea was to discover the source of the Nile. The queen was much upset. She said, "You are come from Jerusalem through all sorts of difficulties to see a river and a bog, no part of which you can take away were it ever so valuable." Bruce, however, got his way, and on the 4th of April, 1770, left Gonda. Pass-

ing Lake Tsana, he reached the Second Cataract of the Nile, which he says was a magnificent sight.

It was just at this time that Fazil, a chief of the Gallas, marched northward, and defeating the king seized Gonda. Bruce met this gentleman, whom he found sitting on a lion's skin in a dirty tent. Fazil proved to be quite friendly, and asked Bruce to breakfast, a meal which consisted of honey, butter and raw beef. Fazil gave our traveler leave to proceed on his journey, and not only that, but presented him with a horse and guides. "These," said Fazil, pointing to seven rough-looking fellows, "are all chiefs of the Galla, savages if you please, yet your brethren. You may go through their country as if it were your own, without a man hurting you."

So Bruce went safely on, and at last reached a place where the Nile was only two hundred and fifty feet broad. Here, he says, he reached an island of green turf in the form of an altar, where he stood enraptured over the fountain that rose in it.

I must warn you, however, that Mr. Bruce was a little given to drawing the long bow. The Nile, as we now know, does not rise in a fountain, but flows out of the great lake Victoria Nyanza. Yet in justice to Bruce I must say this, that his descriptions of the habits and customs of the Abyssinians have since been proved to be fairly correct.

Having attained the object of his journey, Bruce started homeward. He went through the deserts of Nubia, a dangerous journey which took him nearly a year, but he came through safely, and in January, 1773, returned to Cairo.

Soon after Bruce's return to England a society was formed called the African Association, the object of which was to find funds for the exploration of unknown Africa. It was through this society that, in the year 1795, Mr.

Mungo Park was sent out. He started from the mouth of the river Gambia in December of that year. With him were two Negroes named Demba and Johnson. Johnson had been a slave in Jamaica, and so knew English. The party was completed by two black slave dealers and two other Negroes, one of whom was a blacksmith. Mr. Park rode on horseback, the Negroes traveled on foot, the baggage was carried on donkey back.

Traveling inland, Mr. Park arrived at Medina, the capital of Woolli, where the king received the Englishman kindly and gave him guides. With the help of these Park arrived at Fatteconda, the capital of Bondu. The king of this country had a bad name as a robber, but Park had brought him presents, among which was a large umbrella, which pleased the black monarch immensely. Since this was a state occasion, Park wore his best blue coat with brass buttons. The king was enormously taken with this coat, and hinted that he would very much like to have it. So poor Park was forced to strip off his festive garment and hand it over to the king, who in return gave him provisions to continue his journey. The black ladies of the king's family were much interested in the traveler. They refused to believe that his white skin was natural. They vowed that it had been whitened by dipping its owner in milk every day when he was a baby.

After leaving Fatteconda the journey became very difficult. Park had to dodge bands of robbers, and wild beasts were too plentiful to be pleasant. At Joag, the next town at which he arrived, our traveler was plundered by the chief of the place. All his food and money were taken from him, and for some days he had to live on groundnuts. He managed to get away with a whole skin, and crossing the Senegal River arrived at a place called Jumbo, which was the home of his blacksmith companion. The people

were delighted to meet their countryman, and gave the travelers a most hearty welcome.

Still traveling eastward, the party found themselves in danger on account of tribal wars, and were forced to take a roundabout road through the Moorish kingdom of Ludamar. The Moors being Mohammedans had no welcome for the Christian traveler. Indeed, they treated him most brutally, and imprisoned him in a hut with a hog as companion. It was Fatima, the wife of the chief, who came to his aid and gave Park food and better quarters. But he and his men were still kept prisoners, and but for a lucky accident might never have escaped. A rival chief invaded the country, and while a battle raged Park seized his chance and bolted. He escaped his pursuers, but found himself alone in a wild forest country without a mouthful to eat or a drop of water to drink. He struggled on until he dropped unconscious, and there he would have died if heavy rain had not come on and revived him. Toward nightfall he found his way to a negro village, where an old woman gave him a good meal.

Leading his horse, for the poor beast was too weak to carry him, Park traveled onward until he found himself on the bank of a large river which flowed to the eastward, and he realized with delight that this was the Niger of which he had been so long in search. A little way down the river he came to Sego, the capital of Bambarra, and the biggest town he had yet seen. Many of the houses were solid structures built of clay, and two stories high. The river was full of large canoes. Before he entered the town a messenger came to him from the king, refusing him admittance to the city and ordering him to remain in a small village on the other side of the river.

But when he entered this place Park found that the people were afraid of him, and that no one would take him

in. All day he sat under a tree without a mouthful to eat. Evening came, lions began to roar, and our traveler was beginning to fear he would have to spend the night out in the open when a woman took pity on him, and led him into her hut, where she gave him broiled fish to eat. While he ate she and her sisters spun cotton, singing songs while they worked. The words, literally translated, ran thus: "The winds roared and the rains fell; the poor white man faint and weary came and sat under our tree. He has no mother to bring him milk, no wife to grind his corn." Chorus: "Let us pity the white man."

Park spent the night on a mat on the floor of the hut, and in the morning presented his kind hostess with four brass buttons off his waistcoat. He made a second attempt to see the king, but the latter, who was in deadly fear of the Moors, would not receive him, and ordered him to leave his country. However, he sent him five thousand cowries, the small shells which still pass for coin in parts of Africa, so Park was able to buy food and continue his journey. He passed through the large town of Cabba, and finally reached Sansanding. Here he was again in Moorish country, and as usual was very badly treated by the fanatical Mohammedans.

Beyond this place he traveled through lion country, and had several narrow escapes. The people lived mainly on islands in the Niger, where they and their cattle were safe from wild beasts. At Kea he was robbed of all his clothes except a few rags, and a little farther on his horse fell down, unable to go farther. He managed to persuade a fisherman to give him a lift down the river in his canoe, and so arrived at Silla, a large town on the southern bank of the river. Here he had a bad attack of fever.

Left penniless, and without food, poor Park was in a very bad way, and his heart sank when he realized that he

had a journey of some hundreds of miles to perform on foot in order to reach the Gambia. He decided, however, that the only thing was to return at once, and as soon as he was well enough set out afoot. This time he had to avoid Sego altogether and stick close to the banks of the Niger. Often he had to wade through deep marshes. It seems little short of a miracle that he survived the terrible hardships of this journey.

After wandering for weeks, he fell in with a caravan of slaves on its way to the Gambia, and the *slatee,* or slave dealer, agreed to take him to his destination on condition of being paid when they reached the coast. And so after seven months of desperate adventures Park arrived at Juidey, where his friends were awaiting him.

Park's hardships seem only to have whetted his appetite for fresh exploration, for in 1804 he was appointed by the English Government to explore the river Niger. He arrived at Goree just north of the mouth of the Gambia in March, 1805, and was so eager to start that he began his journey in April. This was the wrong time of the year, for the rains were almost due. The first came on the 8th of June, and very soon the party were wading through water knee-deep. The heat was fearful. No fewer than twelve fell sick of fever. A little later and they were attacked by natives, who took advantage of their weakness, and then things went from bad to worse. Park himself became very ill, and by the middle of August, of thirty-eight men who had started from the Gambia only seven remained alive. Even these seven were all sick, and Park hired a canoe to carry the survivors down the river. Then came the worst blow of all—Park's relative, Doctor Anderson, died of fever, and, as Park says, "I was left for a second time lonely and friendless amid the wilds of Africa."

Yet even so Park would not give up, and with the four

Europeans who remained alive set out from Sansanding on his voyage down the river. From Sansanding Park's negro attendant Isaacs brought back his letters and journal; but Park and his companions went to their death. Somewhere near the town of Boussa their boat struck upon a rock. Park, it is said, tried to swim ashore, but was drowned in the effort. And that was the sad end of one of the pluckiest explorers who ever tried to wrest its secret from the Dark Continent.

CHAPTER XXX

DAVID LIVINGSTONE

The Greatest of African Explorers—The Journeys of David Livingstone.

DAVID LIVINGSTONE was born in Blantyre in Lanarkshire on the 19th of March, 1813. His parents were very poor people, and at the age of ten young David went to work in a cotton factory at Blantyre, and stuck to this trade for no less than fourteen years. In those days few boys in cotton mills learned even to read or write, but young Livingstone spent all his small savings in evening classes, and would prop his book upon his loom while he worked. So he laid the foundation of the medical and theological training which was afterward of such immense value. At the age of twenty-four the London Missionary Society accepted the offer of his services, and he went to London to finish his education. By the time he was twenty-seven he had received his full medical diploma.

Livingstone's first idea had been to go to China and work there as a missionary, but the war which broke out there made this impossible, and he decided to go to Africa. He was ordained in November, 1840, and in the following year went to South Africa. His first field of work was in the Bechuana country, and here the young missionary spent

NANSEN ON THE BRIDGE OF HIS SHIP

From "Through Siberia", by Fridtjof Nansen

By permission of Messrs. Wm. Heinemann, Ltd.

OVER SEA-ICE WITH A DOG-TEAM

From "With Stefansson in the Arctic", by Harold Noice

By permission of Dodd, Mead & Co., New York

six months alone among the natives, in order to get a real insight into their language, habits, and ideas.

It was during this six months that he was seized by a lion and horribly mauled. All his life afterward he suffered from the effects of the poisonous bites, but the mere fact that he escaped alive from the fangs of the huge brute made an immense impression on the natives. To them he seemed to have a charmed life. No white man who ever lived has exercised a greater effect upon the African native that did Livingstone, and one of his first converts was the important native chief Sechele. Sechele wished to convert all his people to Christianity, but his idea of doing so was by means of hippopotamus hide whips, a method to which Livingstone naturally objected.

Livingstone was a very broad-minded man. The African native, so he said, is so busy struggling for the mere necessities of life that he has little time for pondering over the mysteries of the Gospel. Livingstone's idea, therefore, was first to supply their simple needs by teaching them how to grow food. Then, as he said, their spiritual education would have a chance. He began this work by building a real house and making an excellent garden.

The Boers prevented him from working among the natives in the Transvaal, so Livingstone traveled northward, and discovered Lake Ngami, which had never before been seen by a white man. It was during these journeys to the north that he became bitten with that passion for geographical discovery which had afterward such invaluable results.

During his stay in the Bechuana country Livingstone had married Mary, the daughter of the Reverend R. Moffat, and in 1852 he found it necessary to send her with their children to England, so that he might be free to undertake farther explorations to the northward. His

plan was to explore the whole country westward to the Atlantic at St. Paul de Loanda and eastward to the Indian Ocean at Quilimane.

While he was away at Cape Town, Boer raiders attacked his settlement. They plundered his house, tore all his books to pieces, smashed his stock of medicines, and sold all his furniture and clothing at public auction *to pay the expenses of the foray.* They also carried away two hundred of his school children into slavery. Any one else but Livingstone would have been discouraged, but all that Livingstone said was this, "The Boers have resolved to shut up the interior, and I am determined to open it. We shall see who will be most successful—they or I."

Livingstone's first journey of discovery began in June, 1852, and it was not until the 26th of May, 1856, that he arrived at Quilimane. He then returned to England and wrote his book "Missionary Travels." No book of the kind has ever created a greater sensation, and this is not wonderful, for it contained as marvellous a series of discoveries as ever were made by one man. Greatest of all was his mapping of a large part of the course of the giant Zambezi River and his discovery of the marvellous Victoria Falls. These falls are the greatest in the world. A volume of water four times that of Niagara drops into a terrific chasm, a depth of four hundred feet, over an edge a mile long. From the depths rise five great shafts of vapor from which comes the native name of the falls, "the Smoke that Sounds."

A direct result of the writing of this book was Livingstone's appointment as British Consul on the east coast of Africa, and two years later he was back in Africa busy with new discoveries. He explored the Shire River, a great tributary of the Zambezi, and established the Universities' Mission in the Shire Highlands. He discovered Lake

LIVINGSTONE AT THE VICTORIA FALLS 254
Stephen Reid

Nyassa, and navigated thousands of miles of inland waterways in a small steamer called the *MacRobert.*

Livingstone's great wish was to end the infamous traffic in slaves. Wherever he and his missionaries went they found villages destroyed and the bush paths lined with human skeletons. Several of his helpers died, his new steamer proved too large to work on the shallow rivers, and

AFRICAN WARRIOR IN WAR-PAINT

the Portuguese flatly refused to grant a right of way up the Zambezi or to suppress the slave traffic. Then followed the cruellest misfortune of all. His wife, who had returned to help him, died and was buried on the shore of the Zambezi. At the end of six years, discouraged and almost heartbroken, Livingstone left Africa and sailed his own little steamer clear across the Indian Ocean to Bombay.

Once more he went home, and wrote his second volume of travels. Then he started on his last and longest journey.

This time he reached Lake Nyassa, which he crossed. From the lake he and his companions marched to the head waters of the Congo River, exploring and mapping a vast stretch of country which was quite unknown, and discovering several new lakes. He next paid a visit to Lake Tanganyika, and made his way through a country infested by cannibals. The stores he had ordered from Zanzibar had been stolen on the way, and he himself was ill and near to despair. At Ujiji he tried to get fresh supplies, but failed. It was at this critical moment that a large caravan arrived, with a white man at its head. This was a relief expedition headed by the famous Henry M. Stanley. "Never," writes Livingstone, "was I more hard pressed, never was help more welcome."

He and Stanley together made further explorations, and later Stanley tried to persuade him to return home. But this Livingstone refused to do, so the two parted company, Stanley returning to the coast, and Livingstone going back to continue his task of searching for the source of the Nile.

The country was one vast sponge. Livingstone was attacked again by fever. It was the rainy season, and everything was soaking wet. His porters left him by Stanley were forced to make a litter in which they carried him to a native village, of which the chief was Ishitambo. The men made him as comfortable as they could, and there he lay all day in a sort of stupor. Late that night he called upon Susi, his native servant, to bring him his medicine chest, from which he took a dose. At four o'clock next morning the boy awoke to find his master kneeling by his bedside cold and dead.

One of the mission boys read the English burial service over the body, then the men buried Livingstone's heart under a tree, carving his name on the bark. His body they embalmed and carried away toward Zanzibar. On the way

they met the second relief expedition under Lieutenant Cameron. So the remains of perhaps the greatest of all English explorers were carried back to England and buried in Westminster Abbey.

Livingstone's great achievement was the abolition of the slave trade. The great Zambezi is now open to the commerce of nations, the natives dwell secure under the British flag, and all that country which seventy years ago was the darkest part of the Dark Continent is now rapidly being settled up and civilized.

CHAPTER XXXI

SEEKING THE NORTH POLE

Reasons for the Search—American Expeditions—Pushing farther and farther into the Unknown—Nansen's Farthest North.

BY the middle of the eighteenth century the only considerable tracts of the earth's surface which still remained quite unknown were those surrounding the two Poles. Hitherto Arctic voyages had been made only with the object of discovering commercial passages round the continents of Asia and America, but with the middle of the nineteenth century began the era of scientific exploration.

Many people have argued that it is foolish to waste time and money and endanger human life in forcing a way through the Polar ice. But it must be remembered that the study of terrestrial magnetism is quite incomplete unless the Polar regions are included in the survey. Meteorology, the science of the weather, which is of such immense importance to navigation, is still more incomplete unless the Polar regions are included. Other sciences such as botany and natural history gain much from Polar exploration.

I have briefly told the story of Franklin's first and second journeys. In 1845 Sir John Franklin started on his third and last voyage. The winter of 1846–1847 was passed just off the extreme north of King William's Land. The vessels had been two years at sea, and food was left for only another twelve months. It was during this winter

that the leader of the expedition died in his cabin aboard the *Erebus*. Captain Crozier of the *Terror* then assumed command, and endeavored to cut a way for the ships out of the ice. Since this was found to be impossible, the ships were deserted, and their crews started southward for the mainland.

The venture ended in disaster, but the fate of the survivors was unknown for some years. No fewer than twenty-one relief expeditions were sent out, but it was not until the year 1854 that the expedition under McLintock discovered that all had died of cold and hunger.

These various expeditions added much to our knowledge of the Arctic seas, and in the year 1871 the United States fitted out a ship called the *Polaris* for the express purpose of reaching the North Pole. The *Polaris* was wrecked in the ice pack, and her crew had to spend the winter in ice-built huts. In the following spring they built a couple of boats, and sailing south were lucky enough to be picked up by a whaler.

In 1875 an English expedition under Sir George Nares started for the North Pole. The expedition was away only one summer, yet in that brief time reached the most northerly point that had yet been attained by man. In 1881 another American expedition went north, commanded by Lieutenant Greely. His ship, named the *Proteus,* reached latitude 82:56° north, but was then compelled to return.

The next expedition of importance was under command of Lieutenant Robert E. Peary, an officer in the United States Navy. Peary, whose name will live as the actual discoverer of the North Pole, made his first Arctic journey in the year 1891. His object was not to discover the Pole, but to cross and explore the north of Greenland.

Greenland is an enormous mass of land with an area of half a million square miles. Up to the year 1888 its interior

was utterly unknown. Then the southern part was crossed by the famous Norwegian explorer Nansen, who found that the center was an ice-clad region rising ten thousand feet above sea level. The curious point about Greenland is that while all its southern portion is covered with an ice cap of enormous thickness, the northern extremity, which is lower, has a milder climate, and in summer is gay with flowers and populated by bear, deer, musk oxen, and other animals.

Peary's exploration was on a much more extensive scale than that of Nansen. He traveled no less than thirteen hundred miles over the ice-crowned interior of the country. The hardships were terrific. The great mountains in the interior were a Sahara of dry, drifting snow. Up here the air was rarely still, so that the snow was almost always drifting. Usually it moved in a steady stream about two feet deep, hiding the travelers' legs to above the knees in a swiftly moving veil. The steady hum of the drifting snow, together with its rapid movement, causes a dizziness which makes it impossible to travel, so when the wind was blowing Peary found it necessary to camp.

After fifty-seven days of travel Peary and his party reached the end of the ice cap, and stood looking down with amazement upon open country where yellow Arctic poppies bloomed, where bumblebees droned among the flowers, and herds of musk oxen grazed contentedly. From this expedition Peary returned safely, having proved that Greenland was an island.

In the year 1879 an American yacht named the *Jeanette* was frozen in the ice in latitude 71° 35′ north and longitude 175° 6′ east. While frozen in she drifted with the ice to 77° 15′ north latitude and 154° 59′ east longitude, a point to the north of the New Siberian Islands. It was this drift of the *Jeanette* which put it into the head of Doctor Fridtjof

Nansen to make his great attempt at drifting across the North Pole. His idea was to build a ship so strong and of such a shape that instead of being crushed by the ice she would rise above it, just as an orange pip rises when pinched between the fingers. The result was the famous *Fram*. She was built of wood, her sides being of enormous strength and thickness. She was fitted with engines and a screw and rigged as a schooner. With a crew of thirteen men, and every inch packed with stores, the *Fram* sailed on the 24th of June, 1893.

On the 4th of August she reached the Kara Sea, and by the 10th of September had forced her way as far as Cape Cheluyski, the most northerly point of Europe. This was the point for which Nansen had been making, for here he hoped to pick up the Arctic current. Very soon the ship was frozen in, but to the disgust of every one aboard, instead of drifting to the north west, they found themselves going south east. Soon the ice was thirty feet thick, and presently came the nip. Like a frozen billow the crushed ice pushed forward against the ship in a huge roll. The *Fram* groaned and trembled, and even Nansen's heart was in his mouth. Then with a mighty wrench she broke from the bonds that held her and rose upward until she was safe.

The course of the current changed, and the *Fram* drifted northward. During the following summer the drift turned to the west, and preparations were made for a dash by sledge toward the North Pole. On the 14th of March, 1895, Nansen, with one companion, Lieutenant Johansen, three sledges, and twenty-eight dogs, left the ship on his desperate venture. The ice was very rough, but on the 7th of April the two had reached a point within two hundred miles of the Pole. Here the temperature averaged 40° below zero. Their clothes and sleeping-bag were frozen stiff, and Nansen decided to turn back. The

difficulties were appalling. May passed and found them still struggling over rough ice. On the 22nd of June they killed a seal, and later on three bears. It was not until August that they reached open water, in which they saw several islands, on one of which they made their winter quarters.

Few men could have survived a winter under such terrific conditions. But these two men not only did so; they kept their health and were able to start away again in the following May.

Fresh adventures befell them. Having climbed an iceberg to get their bearings, their canoes went adrift, and Nansen was forced to swim in his heavy furs through the icy water to retrieve them. Later a huge bull walrus attacked Nansen's kayak (canoe), and nearly destroyed it. He and Johansen camped to repair it, and after supper got into their sleeping-bag and rested peacefully. In the morning Nansen got up first. To his utter amazement he heard the bark of a dog, and looking out across the ice saw a man approaching. This was Mr. F. G. Jackson, leader of the Jackson-Harmsworth expedition. A few hours later the two bold explorers enjoyed the amazing luxury of a wash, clean clothes, and a real dinner in the comfortable quarters of the English expedition.

As for the *Fram* herself, in the middle of July, 1896, she reached open water, and sailed safely back to Norway, reaching Vardo just a week after Nansen and Johansen.

So little was the *Fram* damaged that she was found to be fit for a second expedition, and in June, 1898, Nansen took her north again. This time there was no idea of forcing a way to the North Pole—the journey was one of a purely scientific nature. At this time Peary was already in the north of Greenland, so Nansen decided to survey the land on the western side of the strait. He went into winter

quarters in Rice Strait, and during the period of darkness made several expeditions. In midwinter the temperature fell to —58° Fahrenheit. At the same time Peary, who was then twenty miles to the north, experienced the almost unheard-of degree of cold of —67°—that is, ninety-nine degrees of frost. Peary had seven toes so badly frozen that they had to be amputated.

In spite of the bitter weather a number of musk oxen were found, and provided fresh meat for the crew. The winter passed without accident. The only member of the party who was lost was the doctor, who died early in June. When the ice broke the *Fram* was pushed farther to the west, and a fresh expedition went out, the members of which discovered a new and large island. On this island were the remains of Eskimo villages, where now no natives were to be found.

While the party was away the *Fram* herself had a very narrow escape. For the winter an awning had been spread over the deck, and a spark from the galley chimney fell upon this and fired it. At the time there were but nine men left in the ship. Under the awning were stored the ammunition, the oil barrels, and an iron tank full of spirit. The mate who was in charge made his men drag out the oil and explosives, but the spirit tank was too heavy to move, and the men realized that if it burst the ship was doomed.

Meantime the flames had spread from the awning to the rigging, a quantity of spare wood lying on the deck had taken fire, and the mainsail itself was ablaze. With frantic energy the men attacked the fire with buckets of water, and in spite of their small numbers managed to get the flames under. When the explorers returned they found all safe and were able to get clear of the ice and sail back home.

CHAPTER XXXII

PEARY REACHES THE POLE

The Italian Expedition—The Duke of the Abruzzi breaks the Northern Record—Peary's Successful Dash for the North Pole—Amundsen creates a New Record in a Tiny Ship.

IN the following year, 1899, the Italians for the first time sent out a Polar expedition. This was under the command of a near relative of the king, the Duke of the Abruzzi. The ship, the *Stella Polare,* was, however, partly manned by Norwegians.

The Duke had the good fortune to find the sea unusually free of ice, and succeeded in reaching 82° 28′ north latitude in open water. In September the ship was frozen up, and for a time all went well. Then quite unexpectedly a great ice floe drove into the shore ice in which the *Stella Polare* was frozen up. A huge hummock rose against her bows, her sides were nipped until her timbers cracked, and she heeled over at a perilous angle. Water poured into her hull, and all on board were forced to work with might and main to get the stores out on the ice, for it seemed certain that she must founder. The pumps were set to work, but the water rose over the furnace bars, putting out the fires.

By great good luck the ice was strong enough to prevent the ship from sinking, but she was in a sorry state. The water which had got in had frozen so that the furnaces

were covered with solid ice. Repairs were at once put in hand, and for seven weeks all toiled desperately until at last the vessel was once more seaworthy.

In February the first sledge party was made ready to start, and twelve men with a hundred and four dogs went north. Bad weather, however, forced the party to return, and it was not until March that a fresh start could be made. This party under Captain Cagni reached 86° 34′ north latitude—that is, about thirty miles farther to the north than Nansen's record five years earlier. The whole party returned safely, and the expedition arrived back at Hammerfest on the following 5th of September.

I have spoken already of Lieutenant Peary's discoveries in North Greenland. Lieutenant, afterward Commander Peary, was a man of iron in every sense of the word—iron in resolution, iron in physical strength. One little story may serve as an illustration of these qualities.

Out duck shooting on a bitter winter day, he fired at and killed two ducks which fell into the center of a small but deep pond, the edges of which were rimmed with ice.

"Now you have done it," said his companion. "The dog cannot get the birds, for he cannot bring them back through all that mush-ice."

"Don't worry. I'll get the birds," replied Peary, and there and then he stripped to the buff, and wading out through the cracking cat-ice, swam through the freezing water and retrieved the dead birds.

"The man is a living wonder," said his friend when telling the story afterward. "Would you believe it, his teeth were not even chattering!"

Peary was still quite a young man when he first made up his mind that he was going to reach the North Pole, and with a man of his type the only thing that will turn him is death. He made the first of his three attempts as

early as 1896, and the second ten years later. On this second occasion he actually reached 87° north latitude.

Peary's idea of Arctic traveling was different from that of the explorers who had gone before him. He made a base on the north coast of Ellesmere Island, borrowed sledges and dogs from the tribe of Eskimos known as Arctic Highlanders, and hired the natives to drive the dogs. These Eskimos are generous, hospitable, and trustworthy. They are also excellent hunters, and can generally keep an expedition well supplied with fresh meat.

In July, 1908, Commander Peary left New York with the steamer *Roosevelt* and the auxiliary steamer *Erik*. The *Roosevelt* was the finest and largest ship ever employed in Arctic work. She was one hundred and eighty-four feet in length, with a beam of thirty-five feet. Her sides were of oak from two to two and a half feet thick, and she had engines of no less than seven thousand horse power. She was built to fight the ice by rising upon it and smashing it with her own weight.

The two vessels sailed to Etah, where the *Erik's* stores were landed and the vessel sent back. The *Roosevelt* steamed northward to Cape Columbia on the north coast of Grant Land, a point only four hundred and twenty-three miles from the Pole. In February, 1909, the sledging parties started. The first party was under command of Captain Bartlett, master of the *Roosevelt*. This went as a pioneer to cut through the ridges of hummocks and make the road easier for the second expedition. On the 1st of March Peary followed with twenty-four men, nineteen sledges, and one hundred and thirty-three dogs.

On the 5th of March Peary's party were stopped by a lane of open water, which, as they had no boats, they were unable to cross. During five days Peary paced up and down, in a passion of impatience, then the lane closed, and

his party drove forward at full speed. The ice was fairly good and the weather favorable. Their chief difficulty came from lanes of open water, of which they crossed no fewer than seven. Many of these crossings were made on young ice which swayed and bent beneath the sledges. Reaching 87° 47′ north latitude, Peary sent Bartlett back, and pushed on for the Pole with only his negro servant, four Eskimos, five sledges, and forty dogs.

The speed at which he traveled was extraordinary, and has never been touched by any other Arctic explorer. The party averaged about twenty-six and a half miles daily. No land was found, and on the 6th of April Peary reached a spot which, so far as his careful calculations could decide, was the exact site of the North Pole. Returning, Peary followed his own tracks southward, and traveled at the startling speed of forty-four miles a day.

"The Pole is ours" was the message which reached the Director of the American Museum of Natural History on the 7th of September, 1909—four months after the Pole had been reached—and the only sceptics were the few who believed in the since utterly discredited Doctor Cook, who, six days before the news of Peary's triumph had reached the world, announced that he had gained the prize. As Marie Peary, the explorer's daughter, put it, "If Father had stopped fifty yards short of the Pole he would have said so."

Before finishing my story of Arctic discovery, mention must be made of one of the finest feats of Northern travel ever accomplished. In the early summer of 1903 a Norwegian expedition under Captain Amundsen sailed by way of Greenland to study the North Magnetic Pole, which was discovered in Boothia by Sir James Ross in the year 1831. The Magnetic Pole is the spot where the magnetic dipping-needle is found to point with the north point downward.

Amundsen's ship was a tiny sloop of only forty-six tons burden, and built originally for walrus hunting. His crew consisted of only seven men. The expedition was provisioned for four years. In September, 1906, the *Gjoa*, with all her crew safe and well, arrived at Nome, the great gold camp on the north coast of Alaska. For the first time on record the Northwest Passage had been navigated in a westerly direction, and the accomplishment of the voyage was a magnificent feat of pluck and good seamanship.

CHAPTER XXXIII

THE ANTARCTIC

Farthest South—The Renewal of Antarctic Exploration—A Frozen Continent—The First Expedition of Captain Scott.

LONG after the Polar islands had become fairly familiar to the map maker, nothing whatever was known of similar Southern latitudes. Even the great Captain Cook himself was daunted by the icy terrors of the Antarctic. On the 6th of February, 1775, he wrote in his log, "the risk one runs in exploring a coast in these unknown and icy seas is so great that I can be bold enough to say that no man will ever venture farther than I have done, and that the lands which lie to the south will never be explored."

Yet Captain Cook was wrong, for during the nineteenth century much exploration went on in the Antarctic. In 1819 Captain William Smith discovered the South Shetland Islands; in 1822 Captain Weddell of the brig *Jane* went as far as 74° south, and in 1831 Captain Biscoe discovered Enderby's Land, Adelaide Island, and Graham's Land.

In 1841 the British Government sent Sir James Ross to explore the Antarctic with two ships, the *Erebus* and *Terror*. Land was sighted in 70° 23′ south latitude, with

two fine ranges of mountains, seven thousand to ten thousand feet high. It was this expedition which discovered those two huge Antarctic volcanoes which have been named after Ross's ships.

Mount Erebus, twelve thousand four hundred feet high, was in tremendous eruption when first seen, and has, indeed, been active ever since. Ross's ships sailed for miles along the edges of the Antarctic continent, and although it was then midsummer Ross has put it on record that the highest temperature during the day was never above twenty degrees of frost.

The first of modern scientific expeditions to the Antarctic sailed from the Thames in 1898, in a ship called the *Southern Cross,* commanded by Captain Borchgrevink. This expedition had several curious and unpleasant experiences. At one time the ship was violently shaken by a submarine earthquake, and later was caught in a gale in which the wind blew nearly ninety miles an hour. In March a shore party was landed on the Antarctic continent and left there in winter quarters. A good deal of exploration was done, and many specimens of fish, seaweeds, and other forms of marine life were collected. The interesting discovery was made that insect life exists on the Antarctic land in spite of the almost everlasting frost.

Some of the party had an amazingly narrow escape. Captain Borchgrevink with one of his men named Jensen were on the beach under a cliff when a great roar warned them that something unusual was happening. They looked up to see the whole end of a neighboring glacier break away bodily and drop into the sea. Instantly an immense wave came rolling in upon them. Pressing themselves against the face of the cliff, they clung desperately to a projecting spike of rock while the icy water surged high over their heads. But for that spike of rock both must

inevitably have been swept away. On the 29th of January, 1900, the *Southern Cross* returned and picked up the explorers.

In 1901 a Swedish expedition went south in the *Antarctica* under Nordenskjöld, and did much useful work. For the first time fossils were found in the Antarctic, including bones of large animals and of immense penguins. Remains of different kinds of pine trees and ferns were also discovered, proving that at some former time the climate of the Antarctic was very different from what it is to-day.

The *Antarctica* herself was nipped in the ice in January, 1903, and had to be abandoned. Her crew took refuge on Paulet Island and lived there chiefly on penguins until rescued by an Argentine cruiser.

In the year 1895 there was an International Geographical Congress in London, during which the subject of Antarctic exploration was thoroughly discussed. At its close Sir Clements Markham, President of the British Royal Geographical Society, declared that he would never rest until England had taken her share in penetrating the Antarctic continent.

On the 26th of February, 1898, there was a meeting of the Royal Society in London, at which were present Sir Clements Markham, Sir John Murray, Sir Joseph Hooker, Doctor Nansen, and many other men celebrated in the field of travel and exploration. It was at this meeting that the scheme for a British National Expedition to the South Pole first took form. The British Government, however, refused a grant of money, while the Admiralty was doubtful about allowing any officers of the Navy to take a part in such an expedition. Then Mr. L. W. Longstaff came forward with the magnificent offer of twenty-five thousand pounds, while Sir Alfred Harmsworth (afterward Lord

Northcliffe) gave five thousand pounds. With this large sum in hand, the Society again approached the Government, and in July, 1899, obtained a favorable reply. A sum of forty-five thousand pounds was promised in aid of the expedition, while the Admiralty agreed to allow the necessary leave to such officers and men as might be selected from the Navy.

Even then it took two years before preparations were complete. The ship for the expedition, named the *Discovery,* was built at Dundee of solid oak. She was barque rigged, but had powerful engines. The command was given to Commander Robert Falcon Scott, and as events proved no finer choice could have been made. Five other officers who were allowed to volunteer were Lieutenants Royds, Armitage, Bain, Shackleton, and Skelton. The ship's company consisted in all of twenty-seven men picked out of a large number of volunteers.

The *Discovery* left Cowes for New Zealand in August, 1901, and after a short stay at Port Lyttleton departed southward just before Christmas. It was on New Year's Day, 1902, that she met the pack ice, but after four days of strenuous work she cleared it, and reached the Antarctic continent on the 22nd of January.

Winter quarters were chosen at the base of an extinct volcano named Mount Discovery. All was made snug, and in the following September Captain Scott, with Lieutenant Shackleton and Doctor Wilson, started southward across the land. They had dogs with them, but these animals were found to be almost useless, so the three men had to harness themselves to the sledges in place of the dogs and each pull a weight of two hundred and forty pounds. The ice was fearfully rough, and cut up with yawning crevasses into which the sledges had to be lowered and then hauled up the far side. In spite of these terrible conditions the

ADMIRAL PEARY ON HIS SHIP

Photo Illustrations Bureau

PEARY PLANTS HIS FLAG ON THE NORTH POLE
From "The North Pole", by Robert E. Peary

little party reached the latitude of 82° 17′ south, a distance of five hundred and forty miles from the South Pole.

Here they met with a chasm immensely larger than any they had yet seen, and try as they might they found it impossible to cross, so that in the end there was nothing for it but to turn back. During the return journey Lieutenant Shackleton had the misfortune to rupture a blood vessel. He was not only incapable of pulling his sledge any longer, but he could barely walk. Yet walk he did, and at last, after an absence of ninety-four days, during which time the party had marched at least a thousand miles, the three adventurers returned safely to their ship.

The result of this expedition was to prove that the Antarctic continent is the loftiest in the world. It is a giant tableland, much of which lies between eight and nine thousand feet above sea level. That part named Victoria Land is crossed by a range of mountains rising to fourteen or fifteen thousand feet.

In February, 1904, the relief ship *Morning* arrived, and with the aid of dynamite blasted away the ice which surrounded the *Discovery;* the expedition then sailed homeward.

CHAPTER XXXIV

SHACKLETON AND SCOTT

Shackleton's Expedition in the *Nimrod*—He reaches a Point within 111 Miles of the South Pole—Scott's Second Voyage—How the Depots were laid—The Start for the Pole.

THE results of Captain Scott's first expedition were so interesting that soon after his return a new venture was decided upon. This was under the command of Lieutenant Shackleton. Shackleton's avowed object was to reach the South Pole, and all his preparations were made with that in view. His sledges were built in Sweden, and he took with him fifteen Manchurian ponies, nine Siberian dogs, and a motor car. Instead of the furs worn by previous Arctic explorers, his men were dressed in woollen garments, with outer suits of wind-proof gabardine. His vessel was the *Nimrod,* a small and rather slow craft.

The *Nimrod* left England in July, 1907, and on New Year's Day, 1908, sailed from Lyttleton on her journey south. A landing was made on the Antarctic continent close to Cape Royds, and Shackleton and his party established themselves in a large portable hut which they brought with them. The *Nimrod* then left, returning to New Zealand.

The first task of the explorers was to ascend that great volcano Mount Erebus, and this was successfully accomplished. It was, however, not until the following October

that the southern party started on their dash for the South Pole. The party consisted of Adams, Marshall, and Wilde, with Shackleton in command. The ponies at first did better than expected, but after three weeks' travel soft snow was struck, and the poor animals went to pieces. By the 1st of December the party was left with one pony only, and a week later this last poor creature fell down a crevasse, and it was only by the narrowest shave that the whole party escaped a similar fate.

Still they struggled on, until on the 28th of December they had reached a height of over ten thousand feet. Here a sort of mountain sickness affected them, and they grew very weak. At last on the 9th of January, 1909, when only one hundred and eleven miles from the South Pole, it was found impossible to proceed farther.

The return journey was a desperate battle against failing strength and starvation, yet somehow they struggled through, and early in March reached the coast, where the *Nimrod* was awaiting them. Shackleton was of course bitterly disappointed that he had failed to reach his goal. It is the opinion of Sir Clements Markham that the rations carried were not sufficient to sustain the strength of men traveling in such fearful temperatures and over such terrible surfaces.

Yet in spite of Shackleton's failure actually to reach the South Pole, the results of this expedition were both interesting and important. These results were briefly as follows: the Magnetic Pole had been reached; eight mountain chains discovered; one hundred mountains surveyed, including Mount Erebus; new coast mapped running west from Victoria Land; coal measures discovered in the Antarctic continent; while the theory that there is an area of atmospheric calm round the South Pole was disproved.

Most interesting observations had also been made as

regards the currents of wind in the upper atmosphere, and much good work done in the matter of natural history. A fungus-like plant was discovered in the fresh water lakes, many lichens catalogued and a few mosses. The displays of Aurora Australis were very brilliant all through the winter, the odd thing being that they usually appeared in the eastern sky and seldom in the direction of the Magnetic Pole. The lowest temperature recorded was 57 degrees below zero, or 89 degrees of frost.

While Shackleton was away on his main expedition three other members of his party, Armitage, Priestly, and Brocklehurst, explored the western mountains, and came back with many interesting specimens of rocks and fossils. On the journey back they were camped on the sea ice when it broke up and they were carried out to sea. Their position seemed perfectly hopeless, for two miles of water separated them from the shore ice, and there was no one to help. Just as they had almost given up hope the floe turned and drifted straight back to shore. Though it only touched the shore ice for a matter of seconds, all three were able to spring to safety. The whole expedition returned in the *Nimrod,* and arrived at Lyttleton in March, 1909.

And now we come to what was the most wonderful and yet the saddest of all Antarctic expeditions. I refer to Captain Scott's last great journey. In the year 1908 Captain Scott was happily married to Miss Kathleen Bruce, who was of the greatest help to him in collecting funds for his great attempt on the South Pole. The immense interest which England took in this expedition may be gathered from the fact that Scott had nearly seven thousand applications from men who wished to venture with him.

Scott's ship was the *Terra Nova,* a big Dundee whaler, and no pains were spared in fitting her out. A novelty consisted in three motor sledges from which Scott hoped

great things, but one was lost on landing, while of the other two the engines overheated so badly that they proved useless.

The *Terra Nova* left Stokes Bay on the 3rd of June, 1910, and as usual sailed *via* New Zealand. She finally left for the Antarctic at the end of November, 1910. On the third day out the ship ran into a terrible storm, so bad that her commander was forced to heave her to. Great waves, cruelly cold, roared across the deck, lifting the coal bags and flinging them against the rest of the deck cargo. It looked as if the whole deck cargo would go adrift, so there was nothing for it but to heave the coal overboard. Matters went from bad to worse, the pumps choked, the sea invaded the stokehold, and the fires had to be drawn. With terrible difficulty handpumps were rigged, and very slowly the water was got under.

By the 3rd of December the gale had moderated, and the ship was able to continue her voyage. But two ponies were dead and ten tons of coal were lost, together with a large quantity of petrol.

Six days later the *Terra Nova* entered the pack, and had to force her way through three hundred and seventy miles of ice. This she did successfully, and early in January a landing was made near to the original winter quarters of the *Discovery*. A portable house with stores and equipment were got ashore, and by the end of the month all was ready for the first journey.

After landing the sledge parties the *Terra Nova* returned to New Zealand, bringing with her strange news. Her commander, Lieutenant Pennell, related that he had found in an ice-clad bay the *Fram,* Nansen's old ship, with a party under Captain Amundsen, ready for a dash to the South Pole. But of this expedition I shall have more to say later.

Captain Scott's first task was to lay a great depot for stores at a distance of one hundred and thirty miles inland, in preparation for his attempt on the Pole during the following summer. He started from Cape Evans on the 25th of January with twelve men, eight ponies, and twenty-six dogs. Between them these pulled over five thousand pounds' weight of food and fuel. Two depots were made, the first at Corner Camp, while the second, farther on, was called One Ton Depot.

On their way back they tried a short cut, and found the ice to be heavily cut up by deep crevasses. On the 21st of February, while the men were running by the sledge suddenly a whole team of dogs dropped through the surface snow into a hidden crevasse and hung head downward by their harness. The poor beasts howled dismally. Captain Scott himself managed to anchor the sledge, and the dogs were hauled up one by one until eleven out of the thirteen were recovered.

The other two, however, had fallen out of their harness, and were seen more than sixty feet down, on a snow-bridge which crossed the chasm. Captain Scott himself went down after them, and reaching the bridge fastened the first dog to the rope, which was hauled up, then sent the second up in similar fashion. He himself came up last. It was a most dangerous business, for the cold was so intense that both he and all the men at the rope had their fingers frosted.

There was worse to come. As the party crossed from the Barrier on to the sea ice, the ice suddenly broke up, and two ponies were drowned in spite of every effort to save them. It was not until the 13th of April that the party reached their station.

Winter quarters had been carefully planned, and were very comfortable. All through the winter the members of the party were kept busy, and each day the ten sur-

viving ponies were exercised, while there were frequent lectures and discussions. A paper was published called the *South Polar Times,* which was edited by Cherry Garrard and illustrated by Doctor Wilson. Various excursions were made, one to Cape Crozier to secure eggs of the Emperor penguins, strange birds which nest in the coldest season of the Antarctic year—that is, early in July.

The winter passed, and on the 1st of November, 1911, Captain Scott started on his last great journey. On the 15th of the month One Ton Depot was reached, one hundred and thirty miles from Cape Evans. From this point they made for the Beardmore Glacier, where the ponies, having done their work, had to be shot. From the 5th to the 9th of December the weather was fearful, a hurricane blowing with heavy snow, and it was not until the 22nd of the month that the summit of the great glacier was reached, at seven thousand one hundred feet above sea level. Here four of the twelve men bade farewell to the rest and returned. The remaining eight pushed on, and on the 2nd of January formed another depot, at a height of no less than nine thousand six hundred feet above the sea. Here three more of the eight turned back, leaving five only to make the last dash. These were Captain Scott, Doctor Wilson, Captain Oates, E. Evans, and Bowers. They were now within one hundred and forty miles of the South Pole.

CHAPTER XXXV

TRIUMPH AND TRAGEDY

Amundsen gains the Prize—Scott's Bitter Disappointment—The Return Journey.

ALTHOUGH the remaining distance to be traversed was not great, yet the journey proved very severe. For the five days from the 2nd of January to the 7th the work was all against the collar, and the snow was terribly soft. By the 7th of January the explorers had reached a height of no less than ten thousand five hundred and seventy feet. Even in temperate latitudes traveling at such an altitude means a severe strain on heart and lungs. When you add to this the appalling cold, the bitter gale, and the fact that all five men were pulling heavy loads, it seems amazing that human beings could be found equal to such a task.

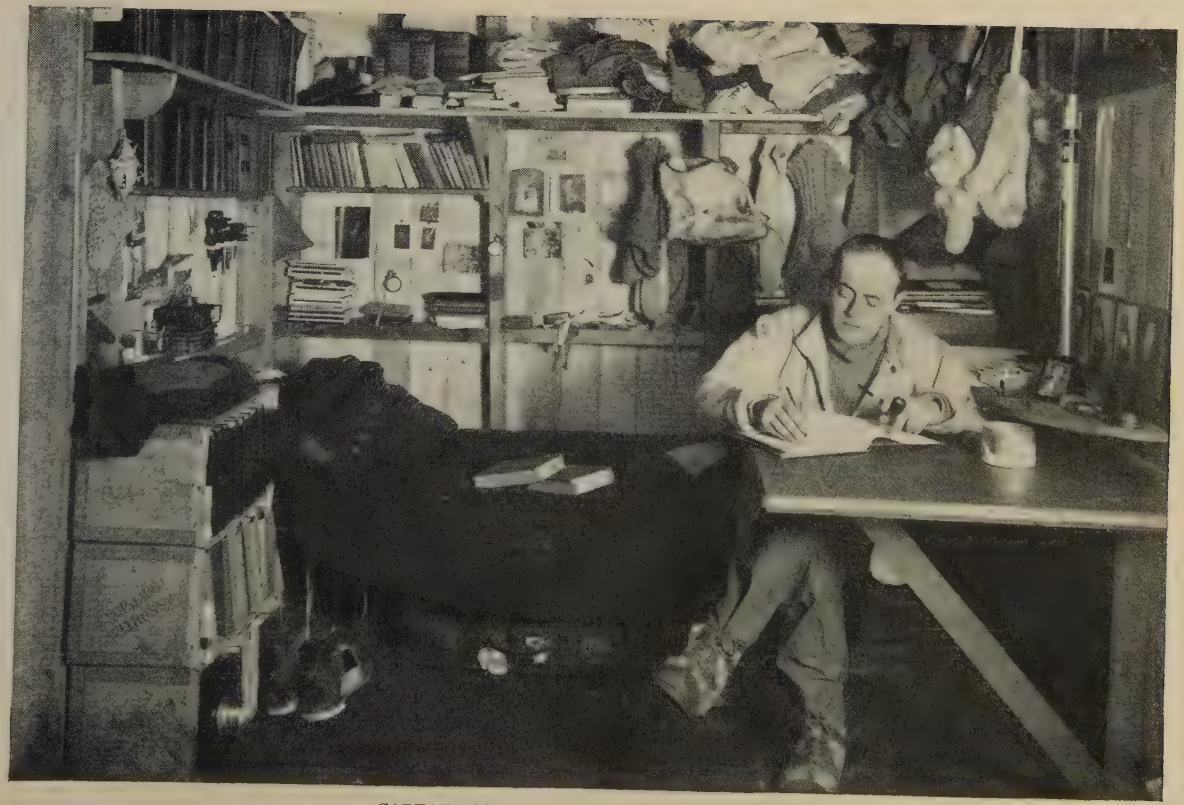
The highest point had now been passed, and the great tableland began to slope downward to its center. On the 15th of January the height was less than ten thousand, and on the following day they were still descending. On this morning they were only about half a degree from the actual site of the South Pole.

That afternoon Bowers suddenly pointed to a dark object against the snow in the distance, which, when they reached it, proved to be a black flag fastened to a sledge-

THE "NIMROD" UNDER SAIL AND STEAM FORCING HER WAY THROUGH THE PACK ICE

From "The Heart of the Antarctic", by E. H. Shackleton

By permission of J. B. Lippincott Co., Philadelphia



CAPTAIN SCOTT WRITING UP HIS JOURNAL

From "The Great White South", by Herbert G. Ponting, F. R. G. S.

By permission of the Author

runner. Around it were the remains of a camp, and it was at once seen that the Norwegian party under Amundsen had been before them. The shock to Captain Scott and his companions was of course very severe, and the camp that night was a very silent and depressed one. Two days later suspicion was changed to certainty, for Captain Scott's party found the tent left by Amundsen, and in it his record of having reached the South Pole, this being dated the 14th of December—that is, just a month earlier.

A cairn was built on the South Pole and the Union Jack hoisted; then the little party started on its homeward journey. The weather was horrible, fifty-four degrees of frost with a strong wind blowing and a curious damp cold feeling in the air. "This is an awful place," wrote Captain Scott, "and terrible enough for us to have laboured to it without the reward of priority."

Traveling became worse than ever, huge wind-tossed ridges of frozen snow perplexed and confused them. Both Oates and Evans began to fail. Still, they reached the three-degree depot on the 31st of January, and from that point pushed on steadily. On the 9th of February they found shelter from the bitter wind under a great cliff of sandstone, in which were seams of coal and most interesting fossils. But Evans was now failing badly, and a week later collapsed completely. On the 17th the poor fellow, who had always been looked on as the strongest of the party, died in the tent.

Now matters began to grow from bad to worse. The cold became extraordinary, temperature falling to —40° Fahrenheit. Captain Oates' feet became seriously frost-bitten. The surface of the ice was terrible, and each day's journey was shorter than the last. "Amongst ourselves"—I quote from Captain Scott's journal—"we are unendingly

cheerful, but what each man feels in his heart I can only guess."

By the 6th of March Oates was unable to pull, and from that date he grew worse and worse, yet never once did he complain, and for eleven more days he struggled onward. On the 17th a furious blizzard was blowing, and the party were forced to remain within the tent. Oates said, "I'm just going outside and may be some time." He never came back. He had sacrificed himself to save the others. "It was the act of a brave man and an English gentleman," Captain Scott has written. "We all hope to meet the end in a similar spirit, and assuredly the end is not far."

The 21st of March found the three survivors only eleven miles from One Ton Depot, but Captain Scott himself was now in as serious a state as Oates had been. They pitched the tent, and Wilson and Bowers announced their intention of going on to the depot and fetching some oil for fuel. Alas! again the blizzard began to blow, and, what was worse, kept on blowing.

Crouched in his sleeping-bag, Captain Scott wrote letters until death caused his pencil to drop from his hand. When found by the search party the bodies of Wilson and Bowers were in their sleeping-bags with the flaps closed over their heads, but the flaps of Captain Scott's sleeping-bag were thrown back, and one arm lay across Wilson's body. Scott had died as he had lived, a brave and gallant gentleman, and one of the most splendid characters of this or any generation.

The search party was led by Doctor Atkinson, but it had not been able to start until the 30th of October, 1912. The tent they found had been so well pitched that in spite of the fury of the gales it was still standing. The snow was of course piled deep over the gear and the sledges, but these

were dug out, and in one of them was found thirty-five pounds' weight of fossils which, with incredible devotion, the almost dying men had refused to jettison.

After the burial service had been read a great cairn was built above the tent and a wooden cross fixed above it. Then search was made for the body of Captain Oates, but the snow had covered it so deeply that it could not be found. So his sorrowing friends built a fresh cairn as near as they could judge to the spot where he had died, and here too a cross was erected.

Captain Scott's last appeal met with a generous response. Funds were raised to provide for the widows and orphans of the brave discoverers who had laid down their lives, for a bounty to the surviving members of the expedition, and for the erection of suitable memorials. A most beautiful memorial service was held in St. Paul's Cathedral at which the king himself was present, and to Captain Scott's widow was given the rank to which her great husband would have been raised.

* * * * *

And now I must hark back to give some brief description of that amazingly successful dash for the South Pole by Captain Amundsen. Amundsen left Norway with the avowed object of proceeding by way of Cape Horn and Behring Strait to the North Polar basin, but on arriving at Madeira in October, 1909, he announced that he had changed his plans and intended to try for the South Pole.

Amundsen had with him in the *Fram* eighteen men and a hundred and ten dogs, and dogs as it proved were far more valuable than ponies for this type of work. What was more, all Amundsen's men were practised ski-[1] runners. Their diet also differed greatly from that of

[1] Pronounced *she*.

the English expedition, for it consisted mainly of seal meat. It is worth mentioning that there was not one case of scurvy among Amundsen's men.

Amundsen's shore party consisted of eight men only, but with this small force the Norwegians succeeded in laying depots, and in doing this task with wonderful speed. Some of the depot parties actually traveled as much as sixty miles in a single day. The depots were flagged for a distance of no less than five miles on each side, so that, whatever the weather, there would be no risk of missing them.

Amundsen made his first start for the Pole on the 8th of September, but running into ninety-two degrees of frost, was forced to return. He then waited until the 19th of October, when he left with four companions and four sledges, each with thirteen dogs. The weather was kind, the snow firm, and for days the party made speeds up to four and a half miles an hour. On the 10th of November they came to a great mountain chain fifteen thousand feet high, known as the great Ross Barrier. Passing over these forbidding mountains, with enough food to last sixty days, the explorers forged ahead. Because they were fast eating their supply of fresh meat, some of the dogs had to be killed. Three days later they were only five degrees from the Pole. For some days Amundsen traveled at great speed, and then came his one serious check, a blizzard which lasted five whole days. On the 7th of December Amundsen's party surpassed Shackleton's record of 88° 23′ south. The cold became intense, and all had their faces more or less frozen, but they hurried forward, and on the morning of the 14th of December the little company, anticipating reaching their goal that day, were early astir. Captain Amundsen told his men to watch their sledge meters carefully, as those meters would mark their arrival

"CAPTAIN OATES NEVER CAME BACK" 284
Stephen Reid

at the Pole. In the middle of the afternoon the cry of the sledge drivers announced the great achievement—the South Pole had been reached. Gathering his men around him Captain Amundsen unfurled the flag of his country, Norway.

The return journey began on the seventeenth, and again the luck of the weather was with them. On one day they actually covered a distance of thirty-four miles. On the 25th of January, 1912, they were all safely back at their base, and all in perfect health. The journey of eighteen hundred and sixty miles had been done in ninety-nine days.

OCT 26 2000

RET'D APR 14 1988

G175.B7 1925
THe young folk's book of discovery
WITHDRAWN
3 0629 0053143 2

G
175
B7
1925

Turner's Book Shop